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ABSTRACT

This evaluation report is designed to meet two major objectives: a) to determine the extent of and the factors associated with variations in success and failure among children enrolled in the Distar Follow-Through programs, and b) to determine variations in success and failure in selected measures as they occur between children enrolled in the Follow-Through programs and in two other early educational programs (Project Read and the Basal Reading Program). All three programs are described as oriented towards the development of reading skills through techniques of programmed learning and reinforcement. This report states, however, that both Project Read and Basal Reading (which utilizes various packages of prepared reading material) have as their philosophy that most failures in general education can be traced to the inability of children to comprehend and follow written material, while the philosophy of the Follow-Through programs is reported to be based on the belief that a pupil's poor performance is the result of poor teaching. This report describes and compares results of student tests, students' background, teacher and principal assessments, and other various measures from the three different programs. Appropriate tables are included in the text. Appendixes include various supplementary materials. (JA)

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FOURTH YEAR RESULTS IN EXPERIMENTS IN EARLY EDUCATION: A COMPARATIVE ASSESSMENT OF PROJECT FOLLOW-THROUGH, PROJECT READ AND THE BASAL READING PROGRAM

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TABLE OF CONTENTS

	Page
Acknowledgements	ii
Table of Tables	vii
CHAPTER ONE - SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	1
Comparisons of Project Read, Basal Reading, and Project Follow-Through	1
Teacher Perspectives - Impact of the Programs	1
Teacher Perceptions of Students	1
Teacher Perceptions of Parents	3
Teacher Perspectives on Accountability	3
Parental Views	3
The Principals	5
Student Academic Achievement	6
School Adjustment	7
Variations Within the Follow-Through Program	8
Recommendations	10
Summary of Recommendations	11
CHAPTER TWO - INTRODUCTION	15
Purpose and Objectives of the Study	16
Early Educational Programs: A Descriptive Account	16
Philosophies of the Programs	17
Description of the Programs	19
Project Read	19
Follow-Through	20
Basal Reading Program	23
Organizational Characteristics of the Programs	25
Grouping Practices	25
Supervisory Structures	26
Program Complexity	27
Specialization of Personnel	28
CHAPTER THREE - METHODOLOGY	31
Population and Samples	31
Students	31
Teachers	32
Parents	32
Administration	33
Schools	33
Procedures and Instrumentation	35
Students	35
Teachers	36
Parents	37
Administrators	37
Analysis of Data	39
CHAPTER FOUR - FINDINGS	43
Part I - The Students	43
Characteristics of the Student Population	43
A. Metropolitan Achievement Reading Test Scores: The Impact of Educational and Social-Psychological Variables	49
Summary	56

B. Teachers' Evaluations of Reading Ability:
The Impact of Educational and Social-Psychological Variables 57
Summary 62
C. Wide Range Achievement Test Scores:
Accounting for Variations Among Experimental Programs 63
Summary 67
D. Stanford-Binet Intelligence Scores:
Accounting for Variations Among Experimental Programs 67
Summary 72
E. Intelligence Scores:
Explaining Variations Within the Follow-Through Program 73
Summary 77
F. Teachers' Evaluations of Reading Ability:
Accounting for Variations Within Project Follow-Through 78
Summary 84
G. Wide Range Achievement Reading Test Scores:
Accounting for Variations Among Follow-Through Students 84
Summary 88
H. School Adjustment:
Classroom Observation of Early Educational Programs 89
Statement of Purpose 89
Classroom Observations 89
Teacher Evaluations 91
Characteristics of the Sample 92
Discussion of the Findings 92
Findings 92
Deviancy from Classroom Norms 92
Work Habits Summary 94
Teachers' Evaluations 98
Classroom Climate 101
Conclusion 102
Summary of Findings on Students 103

Part II - The Teachers 107
Description of the Sample 107
Findings 108
Teacher Satisfaction 113
Teachers' Perceptions of the Attitudes and Characteristics of Follow-Through, Project Read and Basal Reading Program Pupils 122
Summary: Teacher Perceptions and Expectations of Their Pupils 125
Teachers' Perceptions of Parental Attitudes and Characteristics 127
Summary: Teacher Perceptions of Parental Attitudes and Characteristics 130
Accountability: Its Impact on Teachers 131
Summary: Teacher Accountability 137

Part III - The Parents 138
Characteristics of the Parent Population 138
Findings 142
Summary of Findings on Parents 153

Part IV - The Principals 156

RELATED STUDIES 169
"Class, Race, and the Value of Education" 171
"Parental Tutoring as a Function of Perceived Program Effects and Pupil Performance" 178
"Characteristics of Parents as Predictors of Their Satisfaction with School Program" 184
"An Exploratory Analysis of Teacher Accountability" 199
"Fourth Year Results in Early Education: Cost Studies" 210

APPENDICES 213
A. Instruments for Collection of Data on Pupils 215
Basic Census Data for Pupils 216
Classroom Observation Data 220
Adjustment 221
Work Habits 222
Definition of Observation Criteria 223
Classroom Climate Schedule 226
Teachers' Summary Evaluation of Pupils 228
Self-Concept Measurements 229
B. Collection of Data on Teachers 230
Letter to Teachers 231
Teacher Questionnaire 232
C. Collection of Data on Parents 239
Letter to Parents 240
Parent Questionnaire 241
D. Interview Outline for Principals and Teachers 248

TABLE OF TABLES

Table		Page
1.1	Reading Achievement Differences Among Project Read, Basal Reading and Distar Follow-Through Programs	6
1.2	Mean Intelligence Scores of Follow-Through Students: Last Four Years	8
4.1	Variables Accounting for the Most Variation in Metropolitan Reading Test Scores Among Early Educational Programs	51
4.2	Variables Accounting for the Most Variation in Teacher Evaluations of Pupils' Performances in Reading	58
4.3	Variables Accounting for the Most Variation in Wide Range Achievement Reading Scores Among Experimental Groups	64
4.4	Variables Accounting for the Greatest Amount of Variation in Stanford-Binet Intelligence Test Scores Attained by Students Enrolled in Experimental Educational Programs	68
4.5	Variables Accounting for the Most Variation in Stanford-Binet Intelligence Test Scores Among Follow-Through Pupils	74
4.6	Variables Accounting for the Greatest Amount of Variation in Teachers' Evaluations of Follow-Through Pupils' Performances in Reading	80
4.7	Wide Range Achievement Reading Test Scores: Accounting for Variations Among Follow-Through Students	86
4.8	Mean Scores for Deviancy from Classroom Norms, by Program	93
4.9	Mean Scores for Student Work Habits, by Program	96
4.10	Variation in Mean Scores for Students' Behavior by Schools	97
4.11	Teacher Evaluations of Student Obedience to Teacher Norms, by Program	99
4.12	Teacher Evaluations of Student Play Adjustment, by Program	99
4.13	Teacher Evaluations of Student Happiness and Self-Adjustment, by Program	100
4.14	Teacher Evaluations of Student Adjustments Toward Others, by Program	100
4.15	Teacher Evaluations of Student Personality Types, by Program	101
4.16	Order of Importance of Major Variables Accounting for Variations on Criterion Measurements	104
4.17	Teachers' Perceptions of the Greatest Strengths of Follow-Through, Project Read and the Basal Reading Program	109

4.18 Teachers' Perceptions of the Greatest Weaknesses of Follow-Through, Project Read and the Basal Reading Program 110

4.19 Teachers' Suggestions for Improvements to be Made in Follow-Through, Project Read and the Basal Reading Program 112

4.20 Teachers' Satisfaction with Job and Classroom Program 114

4.21 Teachers' Satisfaction with School Setting and Teaching as a Career . . . 119

4.22 Teachers' Perceptions and Expectations of Pupils Enrolled in Follow-Through, Project Read and Basal Reading Programs 123

4.23 Teachers' Perceptions of Parental Attitudes and Characteristics, by Program 128

4.24 Parental Attitudes Toward Their Children's Program and Their Children's Schools 143

4.25 Extent of Parental Surveillance of Children's School Performance 144

4.26 Extent to Which Children Discuss Work in Reading Programs and School Work 145

4.27 Parental Perceptions of the Level of Difficulty of Children's School Work 145

4.28 Extent of Parental Involvement in Children's Home Work During Past Month 146

4.29 Parental Perceptions of the Importance of Good Grades in School 147

4.30 Parental Perceptions of Their Children's Performance in School 148

4.31 Parental Expectations for Children's Future Educational Attainment 150

4.32 Parental Perceptions of Teacher Competency and Program Effects on Child Development 151

4.33 Principals' Perceptions of Follow-Through: Its Strengths and Its Weaknesses 163

4.34 Principals' Perceptions of Project Read: Its Strengths and Its Weaknesses 164

4.35 Principals' Perceptions of the Basal Reading Program: Its Strengths and Its Weaknesses 165

CHAPTER ONE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

We have summarized our conclusions and recommendations into the following two areas of concern in this evaluation study: (1) comparative data on Project Read, Basal Reading and Project Follow-Through; and (2) explanations of differences within Follow-Through.

COMPARISONS OF PROJECT READ, BASAL READING AND FOLLOW-THROUGH

As a way of providing an awareness of the context of opinions within which the Basal Reading, Project Read and Follow-Through programs were functioning it was decided to interview teachers, parents and principals as to their views.

Teacher Perspectives: Impact of Program

In summary, based upon the teachers' comments, it is concluded that:

1. Follow-Through teachers feel that their program is very strong in its impact on students, but that the Distar method presents certain problems to them in terms of inhibiting teacher initiative and motivation.

2. Project Read teachers feel that their program may be rather weak in its impact upon students, but that Project Read presents considerably less difficulties in management for them than other programs.

3. There were no single identifiable strengths nor weaknesses that could be assessed by examining comments made by the Basal Reading teachers. Perhaps because of the diversity in the operation of this program throughout the different schools, there seemed to be little consensus about the various strengths and weaknesses of this program for either teachers or students.

Teacher Perceptions of Students

1. Most teachers feel that the majority of their pupils are interested in school work. The differences between the three experimental educational programs were slight.

2. Follow-Through teachers, on the other hand, were slightly more likely to report a higher average percentage of their students as constituting discipline problems for them (24%) as compared to Project Read (16%) and Basal Reading teachers (12%). The teachers from all programs estimated that the average percentage of pupils who were discipline problems at home was around ten percent.

3. The Basal Reading teachers seemed to feel that a greater average percentage of their pupils were prepared to do the work that was expected of them this year (65%) than did the Follow-Through teachers ($\bar{X}$ = 58%) or the Project Read teachers ($\bar{X}$ = 47%).

4. The teachers in all programs, however, seemed to feel as if they had exerted an impact upon their students this year: when they were asked to estimate the percentage of their pupils who will be adequately prepared to do the work that other teachers will expect of them next year, the Follow-Through teachers had an average estimate of 77% of their pupils, with 64% for Project Read and 78% for the Basal Reading teachers. The expectations that the Follow-Through teachers hold for their black, inner-city pupils, then, are quite comparable to those that the Basal Reading teachers have for their white, more economically advantaged students. The Project Read teachers appear to feel that their pupils were less prepared when they got them, and will be less prepared when they re-enter school next year.

5. These same kinds of differences obtained when the three groups of teachers were asked to state their expectations for the future educational attainment of their pupils. The Follow-Through and Basal Reading teachers had slightly higher average estimates about the percentage of their pupils that would go on to some type of college (40% and 35%) than did the Project Read teachers (30%). Again the Follow-Through and the Basal Reading teachers had a lower average estimate of the percentage of their pupils that would drop out of high school (8% and 14%) than did the Project Read teachers (20%).

6. The Basal Reading teachers indicated that a slightly higher degree of positive affect toward school existed among their students. They reported that the average percentage of their pupils who genuinely seemed to like school was 83% as compared to the average estimate of 72% for Follow-Through teachers and 80% for Project Read. Correspondingly, the Basal Reading teachers, when asked how many of their pupils genuinely disliked going to school, had a mean response rate of 8% as compared with 14% for Follow-Through and 10% for Project Read.

In summary, there are a number of indicators which, due to their consistency, lead to the conclusion that the Follow-Through program has an impact upon teachers' expectations. In nearly all measures, with the exception of those dealing with positive affect toward school, the Follow-Through teachers held perceptions and expectations of their students which corresponded to those that the Basal Reading program teachers had for their pupils. To the extent that one of the objectives of the Follow-Through program might be that of modifying teacher expectations for black inner-city pupils, then, this program has been a success.

Teachers' Perceptions of Parents

There were few discernible differences in teachers' perceptions of parental attitudes and characteristics which might be attributable to the type of educational program in which the pupils were enrolled. Most teachers felt that the majority of parents were interested in their children's school work, irrespective of the type of program. Most teachers, regardless of type of program, were able to establish contact with two-thirds to three-fourths of the parents and would like to reach another 20 percent. Project Read teachers seem to experience slightly more parental criticism about their classroom program than do Basal Reading and Follow-Through teachers, but they also seem able to establish contact with a slightly higher proportion of parents.

Teacher Perspectives on Accountability

1. The majority of teachers, be they from Follow-Through, Project Read or the Basal Reading program stated that they are generally satisfied with the levels of accountability expected from them in their particular programs. Furthermore, the teachers generally agreed that they should, in fact, be held accountable for their teaching performance. The majority of the Follow-Through teachers felt that the nature of their program demanded a high degree of accountability from them; Project Read and Basal Reading teachers, however, reported that considerably lower levels of accountability were expected from them. There was a general agreement among all teachers that higher levels of accountability did create more work for them, but the extra work did not appear to increase dissatisfaction with their job.

2. The Follow-Through teachers reported that administrators, who held very high levels of accountability for them, created the single greatest source of pressure for them. Project Read teachers were split in their opinions: 40% felt that the adminstrators constituted the greatest source of pressure and 47% said that they experienced the greatest impact from their peer group. Project Read teachers also seemed to feel that parents hold them more accountable than is true of the teachers in the Basal Reading and Follow-Through programs.

Parental Views

As compared to parents of children in the Basal Reading program, the Follow-Through and Project Read parents were much more likely to be black, to have lower levels of education, lower occupational positions and lower rates of incidence in which both original parents were found in the home. In summary:

1. Most parents were generally satisfied with the programs that their children were enrolled in and, in fact, would like for their children to continue in their respective programs. Although most parents felt that they were at least fairly well informed about what and how well their children were doing in school, less than half of them were able to indicate what their children were doing in their classes at school.

2. The majority of all parents stated that their children talked a lot about the work that they did in school.

3. Although a somewhat larger percentage of Follow-Through and Basal Reading parents said that their children felt that their school work was too easy for them, Project Read parents were considerably more likely to report that both they and their children felt that the level of difficulty of the school work was quite appropriate.

4. It was found that the Project Read parents are much more likely to help their children with their work at home than were the other two groups of parents. While the Follow-Through parents were similar to the Basal Reading parents in not helping their children very much, it appears as if they refrain from such help for quite different reasons. These are as follows:

    a. Both Follow-Through and Project Read parents assign more importance to high ratings in school than do the Basal Reading parents.

    b. Follow-Through parents are considerably more likely to feel that their children are doing excellent work in school than are either the Project Read or Basal Reading parents.

    c. Follow-Through parents are more likely to feel that their children are doing better school work than are their peers.

    It may be that the Follow-Through parents feel that they will interfere with their children's progress if they attempt to help them at home. On the other hand, the Project Read parents, who also place a high emphasis on good grades at school, seem to feel that their children are not doing quite as well as they should. Consequently, they may do more work with their children in the home.

5. These findings also indicate the great emphasis that black parents are likely to place on the value of education for their children. The white parents of the Basal Reading pupils appear to assign considerably less importance to the notion of getting good grades and as such, seem to be content with average achievement on behalf of their children.

6. Although all parents believe that their children have a pretty good chance of finishing high school, there are considerable variations between the three groups of parents regarding how much further their children shall go in the academic arena. A large majority of Follow-Through parents expect that their children shall become college graduates; most Basal Reading and Project Read parents do not expect their children to go quite that far (perhaps just a few semesters in college).

7. Nearly all parents felt that the teachers of their children were generally competent and interested in their children's progress. This suggests that the reputed estrangement of many inner-city black parents from the schools does not exist in this situation. Nearly all parents felt that their children were generally allowed enough freedeom in their school program to pursue their own interests: the parents of the Follow-Through pupils were even more likely to state that their children were accorded such freedom than were the parents of students enrolled in the generally more flexible Basal Reading program.

8. Parental perceptions of the social competency of their children tended to weigh favorably for the Follow-Through parents; they were considerably more likely to state that their children got along "very well" with other children than were the other two groups of parents.

In summary, it may be said that the Follow-Through program has been successful in: (1) reducing parental estrangement from the school, (2) enhancing parental expectations of their children's achievement and ability, and (3) encouraging parental support of their children's school behavior.

The Principals

Based on interviews with principals, the following conclusions are offered:

1. There is a great deal of variation in which the principals supervise the Basal Reading, Project Read and Follow-Through program. A few appear to devote more of their time to Project Read and Basal Reading and let the supervisors of the Follow-Through program take care of that area (given that there are several programs operating in the same building). Others attempt to distribute their time equally among different programs. The latter approach seems to be associated with a considerable amount of diffusion of certain concepts and practices from one program to another, thereby creating difficulties in attempts to evaluate the effects of one kind of program as compared to another.

2. There appears to be little difference in the kinds of pupil discipline problems which might be attributed to one kind of program as compared with any other.

3. There appears to be little difference in the principal's perceptions about which kind of elementary program creates greater enthusiasm. Some indicated that the Follow-Through teachers were more enthusiastic, but they tempered such statements with the observation that most of the Follow-Through teachers were new, as compared with the other teachers, and were more likely to be enthusiastic because of this fact. As one principal put it, "The more experienced teachers are more used to the day-to-day events and don't come to me so often."

4. There were no consistent reports about which kind of program might be associated with greater satisfaction. Absenteeism, a possible indicator of

dissatisfaction, did not appear to be associated with this type of program.

5. In the event that a teacher is absent, the principals see little difference in providing continuity with the use of a substitute in the programs. In Project Read, each child has his own book and pursues an individual course of action: thus, each child knows what he is to do each day. In Follow-Through, the two teaching aides are quite adept in helping the substitute teachers (who are also trained in the Distar approach).

6. Those principals who expressed high concern about the welfare of their teachers and mentioned less often concerns for their students tended to be supportive of Project Read. On the other hand, those principals who often expressed concerns for the welfare of their pupils and mentioned teacher needs less tended to be supportive of the Follow-Through program.

Student Academic Achievement

As indicated in Table 1.1, the observed reading achievement levels of students in the Distar Follow-Through Program were higher than those of students in the Project Read and Basal Reading projects. While those observed differences were not statistically different at the .05 level, it is clear that the Follow-Through Program is attaining its objectives of aiding poor children of inner city families to achieve up to both national and city norms since the Basal Reading Program students were primarily white and more socially and economically advantaged than the students in Project Read. In addition, the teachers also tended to evaluate the Follow-Through students as reading at a higher level than the students in Project Read and Basal Reading.

TABLE 1.1

READING ACHIEVEMENT DIFFERENCES AMONG PROJECT READ, BASAL READING AND DISTAR FOLLOW-THROUGH PROGRAMS

	Follow-Through	Project Read	Basal Reading
1. Standardized Tests:			
a. Metropolitan Ach. Test: Reading - Grade Level	2.4	2.1	2.3
b. Wide Range Reading Test: Grade Level	3.2	3.0	**
2. Teacher Evaluations*	1.73	1.90	2.03

* Teacher evaluations scaled: 1 = Progressing Very Well; 2 = Progressing Satisfactorily; 3 = Progressing Slowly

** Data unavailable

In conclusion the Follow-Through and Project Read programs are helping inner city students to achieve in reading at very satisfactory levels which are equivalent to the norms of the more advantaged students not in the inner city.

One question is immediately suggested: Would the poverty level children in the inner city have benefitted as much if they had been in the Basal Reading programs? In this study the Basal Reading students provided to the evaluation staff by school administrators were not comparable in ethnic, cultural, family or economic status to those in Project Read. Future research efforts may be directed toward this issue. At this time we can only conclude that the Basal Reading program tends to be achieving its objectives with children not characterized by poverty and ghetto conditions.

School Adjustment

When one controls for family background and teacher, very little variation in adjustment among students can be discerned to be a function of the type of reading program the children are in. In other words, the Basal Reading, the Project Read and Distar Follow-Through programs tend to be relatively equal in their impact on school adjustment.

However, the lack of strong program difference is perhaps the most interesting observation. As stated earlier, the samples observed were quite different in composition: the Basal Reading school is 80 percent white, characterized by much greater family unity and stability, and located on the fringe of the inner city. The sample for Project Read and Follow-Through was 95 percent black, characterized by very low family stability, and is centered in the "inner city". One would expect, given the current literature, that many more adjustment problems and poorer study habits would be found among the inner city population. The lack of any major adjustment differences among the programs becomes an important finding of this study.

In summary it is concluded that current evidence does not warrant the notion that either the Distar Follow-Through Program or Project Read is harmful to the social

adjustment of students. There is a literature which contends that the long term consequences of such programs will be excessive problems of adjustment. Four years of observations of the adjustment of students in the Distar Program does not as yet bear out such a contention. Our findings are that students in the Distar Follow-Through program and Project Read show no observable sign of classroom maladjustment that can be attributed to the programs.

VARIATIONS WITHIN THE FOLLOW-THROUGH PROGRAM

A number of observations can be made with some definitiveness about the long term effects of students in the Follow-Through program. To begin with, the Distar program of Project Follow-Through has continually, for the past five years, produced in a group of children, predominantly black, from poverty circumstances, in an urban area of high unemployment, mobility, and family instability relatively high intellectual and achievement levels as measured by standardized tests. This year's population of Follow-Through students averaged on individually administered Stanford-Binet Intelligence Tests an I.Q. of 105.

Table 1.2

MEAN INTELLIGENCE SCORES OF FOLLOW-THROUGH STUDENTS: LAST FOUR YEARS

1968 $\bar{X}$	1969 $\bar{X}$	1970 $\bar{X}$	1971 $\bar{X}$
108.1	108.7	107.2	105

As indicated in the above table, there has been no substantial drop in the intellectual levels of these students.

Furthermore, when one considers that the more traditional school programs have in the past produced very low I.Q.'s (I.Q.'s from 89 to 94) among similarly disadvantaged children, one cannot help but be impressed.[1]

This is not to say that other programs cannot be as successful. Rather the conclusion is that the Distar Follow-Through program is continuing to produce very acceptable intellectual levels among children of poverty and other handicapping conditions. On this count the evidence of four years of extensive research warrants the view that the Distar Follow-Through program is meeting one of its main objectives: enhancing intellectual skills in academic areas. This view is even further warranted given the academic achievement performance levels of the students in the Distar Follow-Through program. They continued to score at levels comparable to national norms based more heavily on middle-class white children.

In summary, the intellectual and academic skills of many poor inner city children in Grand Rapids has been enhanced by the Distar Follow-Through program. However, every program has its successes and failures. Our question here is: What contributes most to failure or success within the Distar Follow-Through program? It was found in this study that systematic differences in successful enhancement of intellectual and academic reading skills could be attributed to the various schools within which the Follow-Through program was conducted. In other words, some schools contributed more than their share of students with low achievement and intellectual levels when controlling for family and economic background characteristics. In other words, something is going on in certain Follow-Through schools which allows them to overcome the problems of family instability and insecurity to a greater extent than is accomplised in other Follow-Through schools.

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[1]Edsel L. Erickson, Joseph McMillan, Jane Bonnell, Louis Hoffman, Orel D. Callahan, Experiments in Head Start and Early Education: Curriculum Structures and Teacher Attitudes, Office of Economic Opportunity, Division of Reasearch and Evaluation: Project Head Start, Final Report on Contract No. OEO-4150, November, 1969; Orel D. Callahan, Edsel L. Erickson, Jane A. Bonnell, Third Year Results in Experiments in Early Education, Grand Rapids Public Schools: Office of Testing and Evaluation, Grand Rapids, Michigan, June 1970.

We have concluded in this study that the influence of the family is not constant. The problems of children from broken families are compounded when they go to certain Follow-Through schools. In other schools in the Follow-Through program the schools overcame family characteristics. In fact, family problems were overcome in the high achieving schools to produce an average I.Q. of 112. In the low achieving schools of this study, children from families characterized by divorce and remarriage were at a severe disadvantage. They were not so handicapped in the high achieving schools. We may generalize that if a child comes from a stable family the conduct of the school is not nearly as important as it is if the child comes from an unstable family marked by conflict. The same is true for other educationally handicapping family conditions. In this study two schools within the Follow-Through Program enhanced intellectual levels for children regardless of family background, in the other Follow-Through schools the children with appropriate family characteristics did well while the children from handicapped backgrounds fared much less well so that the total I.Q. level of these schools was only 99. Even so, an I.Q. level of 99 - which is near normal for white children including larger proportions of middle and upper social class children - is a respectable attainment for any program working in poverty areas of our inner city.

Recommendations

Next year every effort should be made to consider certain structural properties of the more successful Follow-Through schools to determine how or why they are able to overcome otherwise handicapping family background features. All of the Follow-Through schools used the Distar method and materials. Furthermore, observations by the evaluation staff were that a difference in the use of the Distar materials did not account for the differences in the Follow-Through schools. In addition, teaching experience differences among the Follow-Through schools were very modest and therefore not relevant for explaining school differences. Also we have quite definitively ruled out in our research design the possibility that family differences produced the high and low achieving schools.

From this point, however, explanations of school differences within the Follow-Through program are matters of conjecture. However, on the basis of past research by the authors, it seems reasonable to approach this problem from two angles. The relationships between the teachers, students, staff and parents should be examined for certain properties which have been shown by previous research to effect the teachers' credibility with students and parents. A second analytical attack could be made by an analysis of expectancy differences of teachers among schools. Perhaps outmoded expectancies for certain children may be operating and unwittingly reinforced in certain schools. A third analytical attack could be focused upon teacher accountability and satisfaction. There is reason to suspect, as indicated in both the body and in special reports in this project, that the inexperienced teachers may be more satisfied with accountability requirements than are the others. To the extent that new teachers are clustered in some schools more than others, it might be expected that certain differences might obtain between schools (a possibility that could not be investigated in this evaluation without violating assurances of confidentiality and anonymity). Other analytical approaches may also be warranted.

Whatever the case, in this evaluation research we have been able to isolate school differences which are not attributable to family background or teaching method and this is, in part, what education is about. We have demonstrated that a type of teaching method, Distar, can have a positive effect on the intellectual development of poor children. We have also demonstrated that under certain as yet unspecified conditions the schools using the same methods and materials can overcome family background conditions to a considerable degree, or the schools can continue to reflect the disparities imposed by family background.

SUMMARY RECOMMENDATIONS

1. This is the fourth year of extensive research on the effects of the Distar Follow-Through program. The results have been consistent. The results warrant the

continued expansion of the Distar Follow-Through program given the continued cooperation and enthusiasm of school personnel and parents.

2. However, simply adopting the Distar Follow-Through program will provide no guarantee of dramatic results. There has been considerable variation in the impact of schools in the Follow-Through program which is not attributable to family background or years teaching experience. Every effort should be expanded to find out how to maximize further the contributions of Follow-Through. One suggestion is that further recruitment of teachers to the Follow-Through program should emphasize obtaining new teachers with training in operant behavioral techniques.

3. Given the interests of many educators in the school system a Basal Reading program for black inner city residents should be employed with the same budget per child as the Follow-Through program and then subjected to the same evaluative scrutiny. The Basal Reading students who were to provide the evaluators for this study were relatively affluent, characterized by greater family stability and primarily white. On the other hand, the students in the Follow-Through program were of serious poverty status, primarily black and more likely to be from broken and transient families. Therefore, the fact that the Follow-Through and Basal Reading students were nearly equivalent in academic performance and school adjustment cannot at this time be attributable to an assumed similarity in the influences of each program. It is recommended that the Basal Reading program be given a thorough test with inner-city students if there is the interest of teachers and parents.

4. At the time of the writing of this report sufficient and complete data necessary to assess the relative costs of each program were not available. Hence, no statements are made on cost effectiveness.

Given the variety of programs being implemented at all levels, it is suggested that an economic accountability program be developed which can be easily applied. Such a program should have structured into it a means for assessing the projected costs of

student failure and success. Failing to teach certain skills at the appropriate levels may result in very costly programs in the long run and should be weighed in administrative decisions. It is recommended that several independent firms or consultants be contacted to consider alternate economic accountability systems.

CHAPTER TWO

INTRODUCTION

In previous evaluations of the effects of experiments in early education as conducted by the Grand Rapids Public Schools, the results have quite consistently indicated that:

1. Disadvantaged children who were involved in the Bereiter-Engelmann pre-school and the Distar Follow-Through curricula during kindergarten and first grade tended to score above national norms on various intelligence and achievement measures.[1]

2. Disadvantaged children who were enrolled in the Bereiter-Engelmann Distar compensatory programs for only one or two years of their early educational careers tended to score about equal to national norms on various achievement and intelligence measures.[2]

3. Disadvantaged children with no Bereiter-Engelmann pre-school or Follow-Through compensatory experience (grades: pre-school to first grade) were approximately one year below national norms.[3]

In other words, the current empirical evidence suggests that the experimental programs have obtained certain educational objectives, i.e., as may be assessed by student performances on standardized measures.

To a great extent, however, the existing state of knowledge about the impact of these experimental programs is limited. Little is known, for example, about the extent of or the reasons for variations in the success or failure of children enrolled in the Follow-Through programs, e.g., what factors might account for high and low levels of achievement, intelligence scores, or self-images. Very little is known about the impact of such programs upon school administrators, teachers, and parents.

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[1]Edsel L. Erickson, Joseph McMillan, Jane Bonnell, Louis Hoffman, Orel D. Callahan, Experiments in Head Start and Early Education: Curriculum Structures and Teacher Attitudes, Office of Economic Opportunity, Division of Research and Evaluation: Project Head Start, Final Report on Contract No. OEO-4150, November, 1969.

[2]Orel D. Callahan, Edsel L. Erickson, Jane A. Bonnell, Third Year Results in Experiments in Early Education, Grand Rapids Public Schools: Office of Testing and Evaluation, Grand Rapids, Michigan, June 1970.

[3]Erickson, et. al., ibid., and Callahan, et. al., ibid.

Again, even less is known about the price that may be paid to obtain the higher performance norms associated with the Distar program as compared with other types of early educational programs, i.e., psychological and social costs to the school system, the students, the teachers, the parents, and the administrators.

Purpose and Objectives of the Study

This evaluation project has been designed to meet two major general objectives: (1) to determine the extent of and the factors associated with variations in success and failure among those children enrolled in the Distar Follow-Through programs, and (2) to determine variations in success and failure on selected measures as they occur between those children enrolled in the Follow-Through programs and other early elementary educational programs (i.e., Project Read and the Basal Reading Program).

As is more extensively elaborated in the remainder of this chapter, the study of these three different programs permits the assessment of the impact of open-ended programs as compared to the effects of highly structured, explicitly detailed and rigorously supervised methods of instruction. As such, this comparative evaluation bears directly upon a number of issues which have created a great deal of controversy and speculation: teacher accountability, teacher-student ratios, parental involvement and participation, parental estrangement from the schools, organizational provisions for flexibility and spontaneity for teaching and learning, and even hot lunches in the school. These and other issues, as is developed throughout the remainder of this and the subsequent chapters, have also provided the foci for investigatory attempts. Hence, it is the purpose of this investigation to provide a broad and comprehensive comparative assessment of the impact of early elementary educational programs upon principals, parents and teachers as well as upon pupils.

Early Education Programs: A Descriptive Account

Within the last decade a large variety of innovative and experimental programs have been introduced at the kindergarten and elementary grade levels. These have as

their primary aim the enhancement of the opportunity to acquire and build upon basic learning skills in order that children may (1) improve their academic achievement, (2) enhance their self-concepts, and (3) increase their social competence. It is our aim to describe and analyze three such projects - Project Follow-Through, Project Read and Basal Reading. However, because these programs utilize different philosophies and techniques, they differ in their form, structure and organization. While they constitute integral parts of the school system in which they are located, they are separate and distinguishable organizational units. Each has its own specially trained teachers and distinct modes of accountability - to the students, parents, and sometimes additional supervisors as well as administrative personnel - all of which implies different patterns of social relationships.

Our approach, then, shall be to describe, analyze and compare these three projects in terms of their organizational form (i.e., their objectives and goals, size, complexity and effectiveness).

Philosophies of the Programs

The programs differ in their philosophies and approaches to classroom learning. Project Read and Basal Reading operate with the underlying philosophy that most failures in general education can be traced to the inability of children to comprehend and follow written materials. The programs primarily seek to develop reading skills which in turn facilitate the learning of other skills. The students are grouped by reading ability into small reading groups which receive individual attention at the student's level of performance. As the student acquires additional reading skills, he is promoted to a higher level reading group, allowing each student to progress at his own pace. In this fashion, the programs ensure a minimal level of skill for each phase of the program.

Project Read utilizes a programmed learning set of reading materials supplied by Sullivan Associates. The program has a prescribed form of operation for the teacher

to follow in teaching reading; this includes 24 individual book units for each phase of reading skill. The student progresses through each book individually, his comprehension of the reading material is tested, and he progresses onward to the next unit. Through this procedure, reinforcement of learning skills is said to be provided at each step of the child's development.

The Basal Reading program relies upon various packages of prepared reading materials (Scott-Foresman, MacMillan, Ginn Company) that are developed particularly for teaching reading skills. The packages provide quite elaborate teaching guides and pupil projects from which teachers may select for the individual student. Each school and teacher selects the package they feel most appropriate for their classroom situation. Additional reading materials are provided through the school library for individual student use.

The Follow-Through program, which uses the Distar materials, is also oriented toward the development of reading skills through the techniques of programmed learning and reinforcement; however, the program differs in both its philosophy and approach. Its philosophy is based on the notion that a pupil's poor performance is the result of poor teaching. Its approach differs in that the student is grouped for each academic subject: reading, language and arithmetic. The separate group sessions are characterized by intensive pupil interaction with both the instructor and other students. The students participate in multiple group sessions daily, creating a more rapid and intensive pace of instruction than is typical for other compensatory and regular programs.

Description of the Programs

Project Read

Project Read was devised by Sullivan Associates especially for inner city minority group students.[1] It is a "linguistically structured" reading program which calls for assessing the reading defects and needs of the student after a diagnostic test. It contains a sequential placement arrangement through which a student can be fitted into a sequence for which he is best fitted. The goals of the program are to establish conditions so that the student can (1) work at his own pace, (2) have the opportunity to respond individually to questions, and (3) "experience success" by receiving strong reinforcement as he improves in reading ability.

The program is divided into three stages:

A. Readiness in Language Arts. This is designed in such a way that the student can be taught (1) basic skills of spatial relations, directions and colors, (2) the alphabet, and (3) reading and spelling.

Provided to accompany this stage are the Readiness Enrichment Kit (which contains coloring books, full color enrichment cards, etc.) and the "I Can Read Series". Both of these help to reinforce the concepts taught at this level. Upon successful completion of this stage, the student would have acquired about 126 of the most regularly used words in the English language.

B. Reading Readiness. The objective at this level is to help students perceive the relationships between written letters and sound. The teacher leads the student through the first book after which the student is expected to be able to work on his own.

C. The third stage consists of working with the Sullivan Decoding Kit. This contains various kinds of cards (sound-symbol cards, teacher-letter cards, student-

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[1]Sullivan, M. W., Behavioral Objectives Achieved by the Sullivan Reading Program, Behavioral Research Laboratories, Palo Alto, California.

letter cards) which are designed primarily to introduce new letter-sound relationships and "to help the student begin to discriminate letters and sounds" already learned. On each card is printed a simple easily recognized object which the child is to identify.

It will be noted from the above that the specific focus of the program is (a) on culturally disadvantaged students in inner city schools (although it may be used for other students as well), (b) on improving the reading skills of the students, and (c) for students in grades one through four (although it can also be used for kindergarten pupils).

Project Read's mode of operation is on a one-to-one basis between the student and teacher. It gives opportunity for the teacher to shift back and forth as the student responds to or has difficulties with the work, allowing each student to progress at his own rate.

The Sullivan program is designed to give room for teacher initiative and maneuverability and consequently requires well trained teachers. Theoretically the student's dependency on the teacher decreases, while his confidence and self-concept of academic ability increase. In other words, the desired character of the social relationships between teacher and pupil changes as the student progresses through the programs.

By its specific concentration on improving reading skills, it relates to the general educational program by its objective of providing basic skills in concept building for other areas of learning. Thus, one of the basic assumptions is that improvement in reading ability generates basic skills in the building of concepts which is transferable to other areas of learning.

Follow-Through

Similar to Project Read, the Distar program of Project Follow-Through makes no assumptions about the readiness of the student for school, especially with regard to language development. In fact, it is only assumed that "logic is logic" in the

instruction of language,[1] irrespective of the pupil's background. The Distar program is therefore supposed to be suited at its beginning level (Phase I) for the kindergarten school. This assumed advantage of Distar for underachieving students in the lower grades may be one reason why it has been used primarily with inner city and minority group students.

In contrast to Project Read, Distar focuses not only on language development but also on reading (as a separate but integral part of the language), spelling, and arithmetic.[2] In this way it is wider in scope, more inclusive and comprehensive than Project Read. It is also supposedly designed to improve the student's academic achievement by positive reinforcement of his self-concept and social competence. However, the program, as will be seen, is carefully focused and structured to achieve specific behavioral objectives which supposedly illustrate the attainment of academic skills. These are to be obtained with special materials and a unique mode of operation.

Materials. The Distar materials (published by Science Research Associates) are in three phases, graduated by level of difficulty from simple to increasingly complex. For instance, there are two levels in reading. In Reading I the student is taught the relationship between letters and sounds through rhyming exercises and to decode words which appear to be similar in form. Further, after he learns to associate groups of words with complete thoughts, he then proceeds to make complete stories. In Reading II, the focus in on comprehension. The student is required to respond to questions on materials he has read and then make inferences and interpretations. Also, at this level, he learns letter names, capital letters, etc., which build his word-attack skills. He finally learns to make specified responses to verbal and written instructions in order to internalize the necessity for precise understanding of the materials he reads.

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[1]As portrayed by telephone conversation with Engelmann-Becker Associates.

[2]Distar Instructional System, Science Research Associates, 1971.

Mode of Operation. The techniques for imparting the knowledge, for motivation testing, reinforcing and reviewing the students performance are built into the program. The class is grouped by common performance levels into groups of 5-10 students. The teacher handles each group for 30 minutes while teaching aides teach the other groups. With two or three groups operating simultaneously, the Follow-Through classroom is filled with "meaningful noise." The absence of the simultaneous execution of separate and distince instructional tasks by teaching aides in Project Read and Basal Reading underlines differences in organizational structure between these programs and Project Follow-Through.

The schedule for operation by the teacher has been outlined as follows: (1) the teacher makes a presentation, with the student responding; (2) the teacher evaluates the student's response and employs an outlined mode of correction if needed; and (3) the student is given reinforcement material from "take-home" material and other inducements (raisins, candied M & M's, etc.). While this reinforcement is positive for the successful student, it does not represent a punishment for the unsuccessful because the student is assumed to be going at his own rate.

Because of the immediate feed-back in Follow-Through, the students are taught to recognize appropriate responses. That is, they immediately learn if their response is correct and, it is assumed, acquire a sense of personal achievement. If the student is wrong in his response, the problem is reviewed with him and he has the opportunity to go back over it. The student is never called upon to handle materials he has never dealt without assistance or which do not depend on previously acquired skills. As a result of continuing successes it is assumed that the student attacks each subsequent task with confidence, knowing fully that success is eventually guaranteed.

As we have indicated, Follow-Through has more structure and academic emphasis built into it than does either Project Read or Basal Reading. In addition, there is

a great emphasis upon enhancing the student's self-confidence, hopefully reducing his dependence on the teacher (which is a structural property). The student's confidence in his ability is supposedly built earlier and faster because he sees results faster and earlier.

Another structural property concerns teacher accountability for student performance. The Follow-Through program is supervised in each school by curriculum supervisors trained by Engelmann-Becker Associates. The character of the relationship is one of a critical, though constructive, surveillance of the teachers which is based on the intention of helping the teacher along. The supervisor is not directly a part of the school's administrative structure in that he is concerned only with curriculum matters. He confers with the teacher on deficiencies noticed, seldom needing to involve the school principal. Through these and other monitering procedures, the teacher is held as accountable to (1) the pupil through the process of constant reevaluation of student's performance, (2) to the supervisor who oversees the running of the program, (3) to the principal who administers all educational programs, (4) the parents, and, of course, (5) other teachers. It is assumed that the successful results of pupil performance in the program will generate a high level of teacher enthusiasm even though considerable accountability is demanded from several sources. Such pressures for accountability are not so likely to be present in Project Read and even less in the Basal Reading program.

Basal Reading

The Basal Reading program uses prepared packages of reading materials, oriented toward the particular environmental or learning problems of the child. One "package", the Scott-Foresman "Open Highways" is designed for lower achievers; such children may remain in the same class as their grade-level peers while reading less advanced materials.

MacMillan's "Bank Street", which is another set of materials used in the Basal Reading program, is oriented toward increasing understanding and adjustment for living in an urban environment. The child is supposedly introduced to the broader aspects of city life along with increasing his understanding of his own life.

A third set of reading materials in use in the Basal Reading program is the Ginn Company 360 series. The Ginn 360, an updated version of the older Ginn reading series, focuses directly upon the elemental process of learning to associate written symbols with verbal speech. As such, techniques of decoding are particularly stressed. Heavy emphasis is first placed upon phonics and later progresses to syntax as the child acquires phonetic skills. Thus a linguistically structured program is utilized to teach the fundamentals of reading from the earliest point.

Additional reading and story books, as well as workbooks, provide a reading program to cover several levels of the child's development.

Essentially, all Basal Reading programs stress cognitive growth and meaningful comprehension. Each incorporates the development of sight reading, phonetic and decoding skills. Reinforcement is generally provided through supplementary workbooks. However, since the different packages are mostly general reading books, they tend to focus more upon the improvement of reading skills rather than the basic process of language development, e.g., concept development.

Because of this, some inner city school principals and teachers feel that the Basal Reading series may be inappropriate for children from poor families who are often assumed to lack basic language skills and have limited conceptual understandings of their home environment. Thus some principals favored the Sullivan and Distar programs which are designed to teach basic conceptual skills in language. Again, the carefully stipulated requirements that teachers adhere to the structure of the Sullivan or Distar materials appeals to many principals. While the Basal Reading program does provide for a variety of structured formats, the selection of one and its perusual is a matter of choice for the individual teacher and, hence, is not always utilized.

Organizational Characteristics of the Programs

It has long been recognized among local educational authorities and in the literature that the school organization has a definite impact upon the classroom and student learning situation. The organizational features of particular interest in this evaluation are (1) the ways and bases for student grouping to receive instruction; (2) the supervisory structure; and (3) the complexity of program organization which includes the extent to which personnel specialize or are restricted to certain tasks and roles.

Grouping Practices: Basal Reading students are loosely grouped by reading ability for special attention to reading skills and other educative needs. Students are tested and evaluated by their teachers as a basis for placement in the most appropriate reading group. Basal Reading teachers usually have from two to four separate reading levels in each classroom. Low achievement groups or children with reading problems are sometimes assisted by reading specialists or teacher aides, but most teachers are left to manage their classroom alone. Only the reading sections are grouped, leaving other curricular subjects to be taught as a classroom unit.

The grouping practices of Project Read are more open-ended than Basal Reading. Upon entering the program the child is given placement tests supplied by Sullivan Associates to determine the appropriate reading level or book series. The Sullivan program consists of six series of programmed learning materials; each series consists of four books. The child begins with the most appropriate series, then progresses at his own pace while being tested at each level.

In Project Read, students are grouped by the textbook they are using; however, students may shift groups according to their rates of progress. Some students may complete a book in a few days; others may take several weeks. Because of the open-ended nature of the program (i.e., the student progresses at his own rate), Project Read is frequently referred to as being more individualized in its grouping than other programs.

Project Follow-Through differs radically from the other programs by grouping students for each curricular subject: reading, language and arithmetic. Upon admission to the program, each student is extensively tested and appointed to the appropriate group-level for each subject. A student may participate in different groups for different subjects according to his progress and ability. Thus, Follow-Through students are involved much more extensively in grouping activities.

Supervisory Structures: The structure of Basal Reading program is more conventional; the teachers of each school report only to their principal who, in turn, has primary responsibility for their supervision. When needed, a teacher may solicit the assistance of specialists to assist in resolving a classroom or learning problem; but, for the most part, the teachers have considerable autonomy in the operation of the classroom. Each teacher is solely responsible (in conjunction with the principal) for course content and method of instruction.

Project Read is more organizationally complex than Basal Reading in that the teacher is not only accountable to the principal, but to Sullivan Associates as well. Thus Project Read teachers are accountable to and supervised by a coalition of two supervisory structures: primarily to the school administration, but also to Sullivan Associates who hold the contract for Project Read. However, it was ascertained through teacher interviews that this bifurication was generally complementary. The school principals hold primary responsibility for supervision over Project Read teachers and Sullivan Associates would seldom request more than the principal's consideration of problems brought by them. In return, Sullivan Associates prepare and conduct preservice and in-service training for teachers and provide specialists to assist teachers in classroom teaching problems.

The Follow-Through program is highly structured in its supervision. Teachers are not only supervised by their principals, but also by Engelmann-Becker Associates. The Follow-Through program has its own staff of personnel to supervise and evaluate the

weekly testing of children, the teaching practices of teachers, and general classroom operation. Follow-Through personnel hold dual positions within the school administration, being employees of the school system with the responsibility for administering the Follow-Through program. As such, Follow-Through supervisors are accountable to and directed by Engelmann-Becker Associates as well as the Grand Rapids school administration. This naturally requires more personnel for admininstration of the program.

Students in Follow-Through are tested weekly or bi-weekly and the supervisors discuss each child's progress with the teacher. Teaching sessions are video-taped regularly and sent to Engelmann-Becker Associates at the University of Oregon for evaluation and direction. Thus, Follow-Through teachers are very closely supervised and directly held accountable for their performance. The individual teachers are accountable to both their principals and lower-level Follow-Through supervisory staff, who in turn are accountable to the Follow-Through Project Director, the school system, and Engelmann-Becker Associates. Any problems in teaching are immediately brought to the attention of the supervisor for resolution.

Program Complexity: The complexity of organizational structures varies significantly for the three programs: Follow-Through being the most complex and Basal Reading being the least. This difference would suggest several effects directly attributable to the extent of complexity.

First, organizations of greater complexity usually present more problems of administration. However, the principals interviewed, some of whom had experience with both Follow-Through and Project Read, did not feel that the programs created any significant extra work for them. Conversely, the on-site supervisors tend to resolve the small problems of teaching, leaving the principal free for other tasks. Although more organizationally complex, Project Read and Follow-Through teachers do not appear to present more problems of administration for principals, largely because the supervisory personnel of the two programs function in part as principals' aides.

Specialization of Personnel: There is a quite diverse specialization of personnel among the programs. Uniquely, Follow-Through constitutes both the most complex and simple form, complex in its administration but simple in its use of para-professional teaching aides. All personnel were extensively trained by Engelmann-Becker Associates before beginning the program (from 2-3 months) and periodically receive in-service evaluation and training. The Follow-Through training sessions are also organized to help teachers and their aides acquire the philosophy and values behind the program as well as to provide instruction in teaching techniques and materials.

A major difference of the Follow-Through program from Project Read and Basal Reading involved the use of teacher aides as "teaching aides." The para-professionals are responsible for a major portion of classroom instruction, tripling in effect the number of teachers in the classroom and lowering the instructor-student ratio.

Project Read teachers also received extensive training in the use of Sullivan materials along with periodic in-service training. The teachers generally had at least one and frequently two full-time aides in reading sections. Other supervisory and specialists personnel were available when requested.

As reported in the section on findings, another difference noted concerns the age and experience of teachers within the program. Some principals reported that young and/or inexperienced instructors adapted well to Distar because each instructional step is outlined word-by-word. Since very little preparation is needed, the teacher needs only to read each line as she "instructs." The investigators were led to suspect that teachers who dislike being held accountable, who want classroom autonomy or are innovative in producing their own teaching methods are more likely to dislike the highly structured approaches to teaching as exemplified by Distar and Sullivan programs and prefer the more open, "self-designed" features of the other programs. However, this conclusion is very conjectural and should not be accepted until more definitive evidence is available. We can conclude, however, that the Follow-Through

program requires considerable specialization and training for teachers and teacher-aides in the philosophy and method of the program. The new teachers tend to prefer the Distar features of Follow-Through. The new teachers also tend to feel that frequent testing and evaluation (which provides for accountability) is a major asset of Follow-Through. The older teachers preferred Project Read and Basal Reading, perhaps because it offered more flexibility and autonomy for the teaching role.

CHAPTER THREE

METHODOLOGY

In this chapter, information is provided on (1) the populations selected for investigation, (2) the procedures and the major instruments employed for data collection, and (3) the major modes of analysis.

Population and Samples

Students

The general student population for whom data were collected for this study included all second grade level inner city students in a midwestern metropolitan city of approximately 198,000 people.

For the purposes of this investigation, the second grade level population was categorized into four major sub-populations. The size and nature of these four major groups is as follows:

1. Second grade pupils in the Distar Follow-Through Program (N = 153). All students enrolled in this program were eligible for the 1967 Head Start Program funded by the U. S. Office of Economic Opportunity. Data were collected primarily on those students who had been enrolled in the Bereiter-Engelmann Head Start Program and continued in the Distar Follow-Through Program.

2. Second grade pupils enrolled in Project Read (N = 58). With the help of certain Grand Rapids Public School administrators, one school was selected which employed the Project Read program. The students in this program were demographically similar to those enrolled in the Distar Follow-Through Program in nearly all respects.

3. Second grade students enrolled in the Basal Reading Program (N = 80). With the help and advice of the Grand Rapids Public School administrators, one of the "fringe" schools, serving a population of closely similar socio-economic status levels, was selected as a comparative setting.

4. Second grade students who had been in but left the Distar Program for various reasons (N = 31). A larger sample had been desired for the Follow-Through "Leavers", but since their attrition appeared to be a function of parental residential mobility (frequently to other cities and states), time and financial limitations were prohibitive.

The demographic characteristics of these four groups of students are elaborated in the chapter which deals with Findings.

Teachers

Questionnaire and interview data were collected from teachers in the Follow-Through Program, Project Read and Basal Reading. One of the problems in focusing exclusively on teachers at the second grade level, particularly those teachers of the students under study in the three programs in question, was that there were not enough teachers to provide a sample suitable for statistical analysis (Follow-Through Teachers, N = 13; Project Read, N = 6; Basal Reading, N = 3). Therefore, since one of the objectives of this evaluation is that of assessing teacher attitudes and opinions about program effects, the sample was expanded in order to obtain approximately 30 teachers from each kind of program. To do this, data were collected from both first and second grade levels. Completed questionnaires were returned by 21 Follow-Through teachers, 15 Project Read teachers, and 29 Basal Reading teachers. The total teacher sample of 65 will be employed only when appropriate; in those cases in which the research question refers to only those students under investigation, only the teachers of these respective students shall be analyzed. The different uses of the teacher sample and sub-samples shall be stipulated and elaborated in the chapter on Findings.

Parents

In order to collect information on parental attitudes and opinions about their children's progress in the three different compensatory education programs, approximately 90 parents were interviewed. From each program, the names of the parents of 30 students were randomly selected. A more complete description of the parents is provided in the chapter which deals with Findings.

Administration

The principals of seven different schools in which the students in this study were enrolled were interviewed by the principal investigators. With one exception, the principals were young, black males; a white female was the principal of the "fringe area" school. In order to further derive prospective philosophical, procedural, financial and other relevant differences between the programs, the investigators interviewed building supervisors, area supervisors and the directors of Follow-Through and other reading programs.

Schools

In the seven different school buildings involved in this study, there were a number of notable differences. Some buildings were quite old; others were very new. Some served quite large student populations while others were rather small. In some schools, all three compensatory education programs were being offered; in others, only one program was given for all early education pupils. From the perspective of the investigators, all of the buildings were well-maintained.

The schools varied considerably in terms of size, racial identification of the student population, age of the building, and general condition. The respective schools may be characterized as follows:

> School 0: Constructed in 1892, several additions were made until 1951 when the Board of Education decided the building was inadequate and must be replaced. Consequently, no further improvements were made. In 1967, plans were made to replace the old building in three phases. The first phase was completed and then it was decided that this building would be phased out. Since that time, little has been done in the way of improvement with the exception of the rebuilding of the library, the installation of new lighting, and some cleaning and painting. Children are sometimes burned on the exposed radiators. It is hard to control the heat in the rooms--they are either too hot or too cold. Some stairways still need hand rails. Bathroom facilities are quite inconvenient, some located in the basement where it is most difficult to supervise. Storage space is at a premium. Office space is cramped and most unattractive; no more than three persons can hold a conference in the main office. The gym is so small that the whole student body cannot ever meet together, let alone accommodate community gatherings. The administrators are quite apprehensive of this school as a fire hazard. The building is old and dry and the middle stairwell

creates a draft. The outside fire escapes, while functional, are also hazardous. In 1962, when inspected by the State Fire Marshall's Department, this school was recognized as being below the minimum fire safety standards established by the state. The ancient coal heating facilities create soot and smoke, requiring constant cleaning operations for the custodians. The floors are old, rough and irregular in spots and it is extremely easy to fall down; this creates a dangerous situation when traffic flows through the hallways. There is also a constant fight to control roaches, rats and mice.

There are 613 pupils in School 0; 101 of them are in Project Follow-Through. There are 4 Indian students, 575 blacks, 15 chicanos and 19 whites.

School 1: This school is located in the center of the city. It was completed and opened in 1954. There is a park on the same site that is a focal point for young people during the summer months. Since this school is a Section 3 school, 15 instructional aides have been added. It is said that this school has probably the most vocal and active parent group in the city, for the concerned parent group and its leadership is centered in the neighborhood and most of their children go to this school. School 1 has a total enrollment of 616 students, 101 of them are in the Follow-Through program. The racial composition of the student population is: 591 blacks, 19 chicanos, and 6 whites.

School 2: This inner-city school was built in 1914. Although the construction of the original building is very good, a number of additions have been erected and a considerable amount of remodeling has taken place. Although the main building is ancient, it is well-kept. There are 395 pupils in this school, 99 of whom are enrolled in the Follow-Through Program. There are 327 black students, 17 chicanos, and 51 whites.

School 3: This school, located in the "fringe" area, was constructed in 1923. A spacious, well-kept building, this school contains 539 students. There are 4 Indians, 1 black, 14 chicanos, and 520 whites attending this school. The instruction of reading in this school is centered around the Basal Reading Program.

School 4: This school, located in the central city, was completed in 1922. Of the 363 children enrolled, 105 are in the Follow-Through program. There are 4 Indian children, 276 blacks, 30 chicanos, and 58 whites. This building is also well-maintained.

School 5: This school was completed and opened in 1956. Designed as an architectural experiment in a neighborhood of continuous industrial growth, it was the first "convertible" school to be erected in the nation. The plans for this building were exhibited in Geneva, Switzerland in 1957 at the Twentieth International Conference on Public Education. This school, which serves as the central office and the main site for Project Follow-Through, has a total enrollment of 93 pupils. Of these, 42 are black, 6 are Oriental, 13 are chicanos and 32 are white; thus, this school has the highest proportion of racial mixing of any of the schools under investigation.

School 6: Built in 1953, this school was one of the first better schools in the inner-city and became the pride of the community. The school has an open-door policy for community participation and has become a center of activity. Many of the more involved parents, however, have recently relocated to a housing project.

This attractive, well-kept building houses 281 pupils, 205 of whom are enrolled in Project Follow-Through. There are 359 black pupils, 13 chicanos, and 9 whites.

In the Findings chapter, the various schools shall be referred to by the above designations, i.e., School 0, School 1, School 2, etc.

Procedures and Instrumentation

Because there are so many different populations included within this single study a number of different procedures and approaches had to be employed in the collection of the data and other information.

Students

Several different techniques were necessary to collect the vast amount of information needed to assess the differential impacts of the three elementary programs upon students and the variations which might occur within each respective compensatory effort. The major data collection methods were:

1. School records data: the investigators, accompanied by a trained team of college students, systematically perused student school records data concerning such variables as race, sex, size of family, socio-economic level, previous intelligence test scores, prior achievement test scores, health problems, and other information. (See Appendix A for instrumentation.) Information was gathered on 291 pupils.

2. Classroom observations: college students majoring in education were trained to observe children's academic and social behavior while the children were engaged in independent working assignments. The specific procedures and the findings of this approach, which constitute a separate study, are reported in Appendix A. There were 203 children who were observed.

3. Teacher evaluations: after each trained observer had finished recording the behavior of each child assigned for observation, a form was presented to the teacher. The teacher was asked to provide a more comprehensive evaluation of the student's general academic and social behavior. (See Appendix A.)

4. Intelligence measures: five testors were trained to administer Stanford-Binet Intelligence Tests. A total of 120 pupils were given these tests on an individual basis. These second graders were selected for sampling on the basis of several considerations: (1) program enrollment in order to assess differences among programs, and (2) the presence of prior test scores as a means of ascertaining changes and variations within programs. Approximately one-half of those

who were tested during the conduct of this study had been tested with similar measures during previous investigations; only this sample can be used to indicate changes in intelligence test scores which might be attributed to program influence.

5. Achievement measures: the same pupils who were given the Stanford-Binet Intelligence tests were administered the Wide Range Achievement tests.

6. Self-concept of academic ability: after the Wide Range Achievement tests were given, the testors asked the pupils a short series of questions which were designed to assess varying levels of self-images of academic ability (See Appendix A).

The investigators concluded that all of these separate measures were necessary in order to obtain valid measurements of (1) academic performance, (2) social competence, and (3) self-concepts of the pupils.

Teachers

Two major methods were utilized in order to obtain information from teachers regarding their attitudes, opinions and practices in the three educational programs. First, the investigators conducted interviews and held informal conversations with various teachers throughout the duration of the study. These interviews and conversations were designed to obtain information about teacher satisfaction, job satisfaction, satisfaction with program content and pupil progress, and other relevant information (see Appendix B for interview schedule). A number of teachers from each program were formally interviewed; all 21 of the teachers of the pupils sampled in this study were informally contacted at one time or another by the investigators or their associates.

Second, a formal questionnaire was sent to the principals to be distributed to the teachers. The teachers were asked to fill out the questionnaires, place them in the provided envelopes, and drop them into the school mail. The 21 teachers of the pupils selected for this study were given questionnaires, but this sample is too small for the statistical analysis. Consequently, the teacher sample was expanded in order to ensure that approximately 20 teachers from each of the three types of compensatory

programs might be studied, giving a total teacher sample of 65. Since there were not enough Follow-Through teachers at the second grade level, some were included who taught at the first grade level; a similar problem, with a similar solution, was the case for both Project Read and Basal Reading teachers. Of the ninety questionnaires which were distributed to the teachers, 21 were returned from Follow-Through teachers, 15 from Project Read teachers, and 29 from teachers in the Basal Reading Program. (See Appendix B for Teacher Questionnaire.)

Parents

The names of parents were taken from the student record files located in the various schools concerned in this study. From the total population of 293 names of parents, 30 names were randomly selected for each of the three different compensatory programs. A total of 89 parents were successfully interviewed.

A team of graduate students from the Western Michigan University Department of Sociology were assigned the following tasks:

1. Formulate theoretically sound research problems which could be addressed to the parents of inner city children enrolled in compensatory education programs.

2. Design instruments capable of assessing the research problems which had been formulated. (See Appendix C.)

3. Conduct the interviews and collect the data from parents.

4. Submit a report of their findings. (See section on Related Studies.)

Due to the fact that this part of the project was conducted in the spring when racial hostilities were erupting in the high schools, the team hired three black interviewers, who were an invaluable contribution to the completion of this project.

Administrators

One frequently neglected area of many program evaluations is that of the role of various administrators. Consequently, the investigators made it a point to personally interview the principals of all schools involved in the study as well as various other

administrators, e.g., the directors of the Distar Follow-Through and Project Read programs, the director of Reading Services, various administrators in the Elementary Education Office and other key persons.

These persons were of central importance to the investigators in attempting to clarify the objectives and procedures of the three elementary education programs.

The principals were given taped interviews. The unstructured interview schedule lasted approximately one hour and permitted the respondents to reflect on various administrative problems, discipline problems and other important areas associated with the compensatory programs. (See Appendix D for Interview Schedule for Principals.) More specifically, the principals were asked to explain their roles with regard to (1) the programs, (2) the teachers, (3) the students, and (4) the parents and the community.

Some of the principals supervised schools in which several different compensatory programs had been implemented: these persons were of great value in providing observations and opinions about the relative merits and short-comings of the different programs. Other principals were in charge of schools in which only one program was in operation and, consequently, were less able to compare and contrast the different procedures, philosophies, and objectives. The investigators quite quickly reached the agreement that all of the principals were extremely competent, highly dedicated, and totally committed to the provision of a better education for their students. Without exception, the principals were judged to be very dynamic, highly articulate and very forthright individuals.

As is reported in the chapter dealing with Findings, however, it is the impression of the investigators that there is a great deal of variation in the administrative practices of the principals. As such, one of the limitations of this investigation revolves around the fact that no facile assessment can be made of the differential impact of the respective administrators upon the effects of the different compensatory programs. This particular problem shall be dealt with more extensively in the next chapter.

Analysis of Data

Two major statistical tools have been employed throughout this report. The analyses were performed on the PDP 10 computer at the Western Michigan University Computer Center.

The teacher and parent data have been analyzed with the use of theta (θ),[1] a coefficient of differentiation which describes the association between one nominal scale (i.e., whether teachers or parents were associated with Follow-Through, Project Read or Basal Reading) and one ordinal scale (responses to questionnaire and interview items which were categorized on scales ranging from "high" to "low"). Theta, in each case, describes the percentage of the comparisons among individuals associated with each program who show consistent differences in their answers to the question. This may be illustrated by providing an example. Suppose we have a group of teachers classified in terms of their school program and we are able to rank them in job satisfaction. Our results may be arranged as follows:

Program	Rank in Job Satisfaction					
	5	4	3	2	1	θ
Follow-Through Teachers	1	2	5	2	0	
Project Read Teachers	10	5	5	0	0	
Basal Reading Teachers	0	0	2	2	1	
Others	0	0	0	2	3	.75

Thus for these individuals we can predict job satisfaction on the basis of program affiliation rather well. θ shows that in 75% of the comparisons made, persons in the various program positions show systematic differences in job satisfaction.

The second major mode of analysis, the Automatic Interaction Dection analysis, had been used only with the student data. This highly sophisticated form of computer analysis performs a number of different operations simultaneously. Perhaps the best

[1] Freeman, Linton C., Elementary Applied Statistics, John Wiley and Sons, New York, 1965, Pp. 108-119.

way to explain this is also by way of illustration. Let us say that we wish to determine which kinds of educational and social-psychological variables explain the greatest amount of variation in intelligenct test scores (the dependent variable). We have obtained data on a number of other variables, e.g., the school attended, the type of reading program in each school, father's occupation, mother's occupation, parental marital status, and the number of siblings in the home. We wish to know which of these variables is of the greatest utility in explaining why some students get high scores on intelligence measures and why others receive low scores. Furthermore, we wish to assess the relative strength of each of these variables in accounting for as much of the variation in intelligence scores as possible. In our example, this would first be done by calculating the mean, standard deviation and the variance of the intelligence scores. Next, the mean intelligence score is found for each sub-class within every independent variable; the sub-classes are then arranged in a hierarchy according to mean scores and split into two groups (high and low). This occurs as follows:

Father's Occupational Level

		High Group
1	$\bar{X}$ = 120	$\underline{n}$ = 20
2	$\bar{X}$ = 116	$\bar{X}$ = 118
. . . . .		
		Low Group
4	$\bar{X}$ = 106	$\underline{n}$ = 100
3	$\bar{X}$ = 104	$\bar{X}$ = 104
5	$\bar{X}$ = 102	

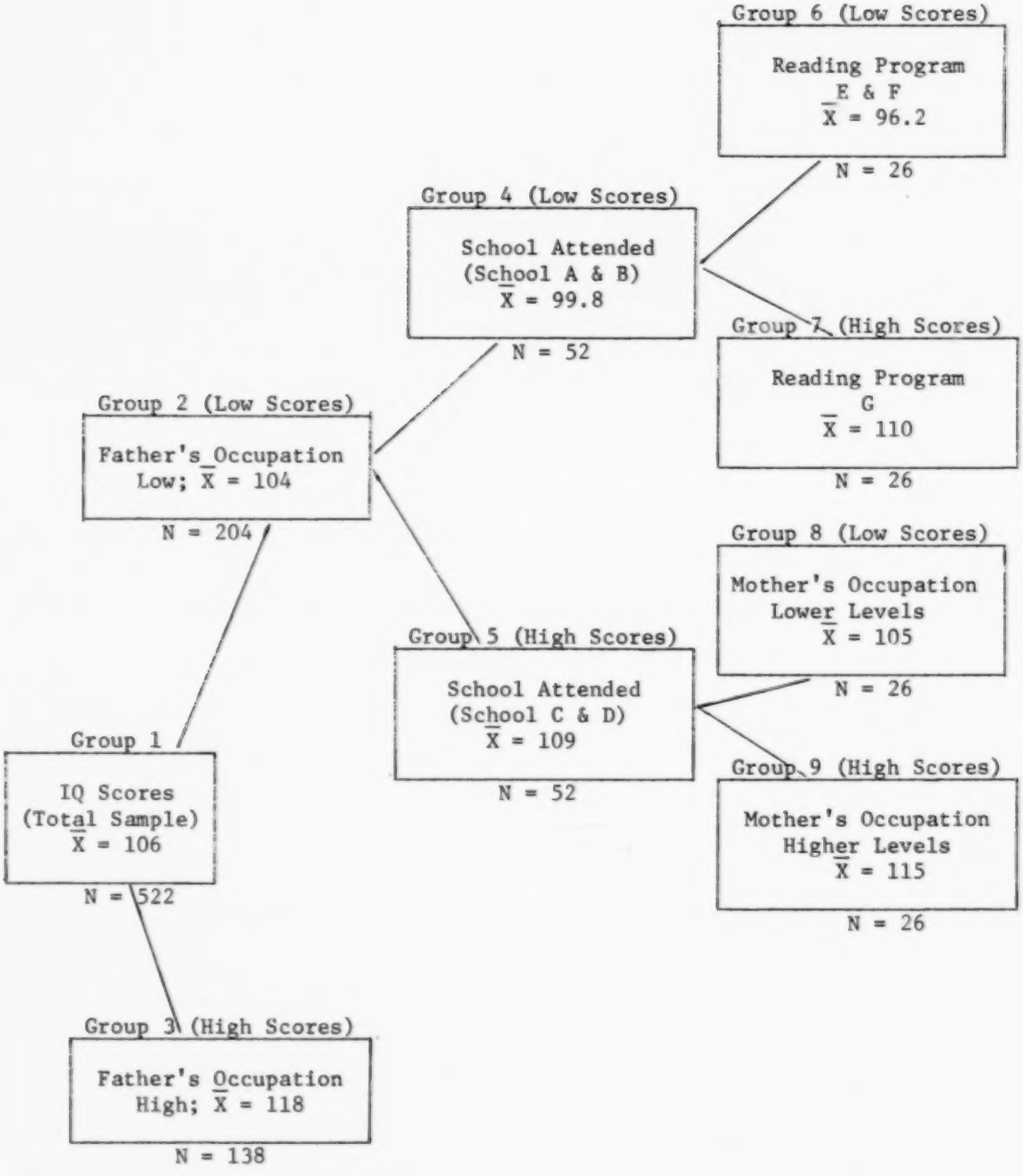
School Attended

		High Group
C	$\bar{X}$ = 115	$\underline{n}$ = 50
D	$\bar{X}$ = 111	$\bar{X}$ = 113
. . . . .		
		Low Group
A	$\bar{X}$ = 104	$\underline{n}$ = 70
B	$\bar{X}$ = 102	$\bar{X}$ = 103

Number of Siblings

		High Group
2	$\bar{X}$ = 114	$\underline{n}$ = 40
1	$\bar{X}$ = 112	$\bar{X}$ = 112
3	$\bar{X}$ = 110	
. . . . .		
		Low Group
4	$\bar{X}$ = 105	$\underline{n}$ = 80
0	$\bar{X}$ = 103	$\bar{X}$ = 103
6	$\bar{X}$ = 102	
5	$\bar{X}$ = 100	

The dichotomies which are formed give us the greatest possible difference (analysis of variance) between groups. That particular independent variable which explains the greatest amount of variance in intelligence scores is indicated in the computer print-out. This allows the investigator to construct a diagram illustrating the linkage between the dependent and independent variables in the following manner:


Group 6 (Low Scores)
Reading Program
E & F
X̄ = 96.2
N = 26
Group 4 (Low Scores)
School Attended
(School A & B)
X̄ = 99.8
N = 52
Group 7 (High Scores)
Reading Program
G
X̄ = 110
N = 26
Group 2 (Low Scores)
Father's Occupation
Low; X̄ = 104
N = 204
Group 8 (Low Scores)
Mother's Occupation
Lower Levels
X̄ = 105
N = 26
Group 5 (High Scores)
School Attended
(School C & D)
X̄ = 109
N = 52
Group 1
IQ Scores
(Total Sample)
X̄ = 106
N = 522
Group 9 (High Scores)
Mother's Occupation
Higher Levels
X̄ = 115
N = 26
Group 3 (High Scores)
Father's Occupation
High; X̄ = 118
N = 138

As may be seen in the preceding example, the total student population had an average intelligence score of 106. The single strongest independent variable which explained the greates variation in these scores is Father's Occupational Level. Children whose fathers had higher occupational positions had an average score of 118; for these 138 children, this single variable explained nearly all of the variance within the limits which were established and no additional independent variables are needed.[1] Children from families in which fathers had lower levels of occupations had an average score of 104, but this single variable does not account for all of the variation within this group. As seen in the example, the children from lower socio-economic status families who went to schools C and D did better than did those in schools A and B. The variations in test scores in school C and D can be further explained by the occupations that the pupils' mothers are engaged in. In schools A and B, however, the type of reading program that the pupils were in is a more useful explanatory variable. In this example, then, the students enrolled in Program G obtained above average intelligence scores (110) even though they were from lower socio-economic status families and attended underachieving schools.

In other words, the AID program can determine which variables are related to intelligence scores "under what conditions, and through what intervening processes, with appropriate controls for spuriousness."[2] As such, the program enables the researcher to go beyond the reporting of descriptive statistics by providing the explanatory or predictive power of all the variables, as well as of each individual variable.[3]

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[1] The researcher establishes varying limits by designating t-test levels of significance and the minimum number of subjects to be assigned to the sub-classes in each independent variable.

[2] Sonquist, John A., and Morgan, James M., The Detection of Interaction Effects: A Report on a Computer Program for the Selection of Optimal Combinations of Explanatory Variables, Ann Arbor, Mich.: Institute for Social Research, University of Mich., 1970.

[3] Sonquist, John A., Multivariate Model Building: The Validation of a Search Strategy, Ann Arbor, Mich.: Institute for Social Research, University of Mich., 1970.

CHAPTER FOUR

FINDINGS

PART I - THE STUDENTS

As has been described in the chapter on Methodology, the school record files were perused to obtain background information on 291 second grade level students. Data were collected for 153 Follow-Through pupils, 58 Project Read pupils, and 80 pupils enrolled in the Basal Reading program. Information was also collected on an additional 31 children who had been enrolled in the Follow-Through program at one time or another and had since dropped out - generally due to residential relocation. This latter group, herein referred to as the Follow-Through Leavers, are not included in the analysis of the total pupil sample of the 291 students. This group, because of certain differences which shall be discussed, are included for comparative analyses only when appropriate; such inclusion will be designated.

Characteristics of the Student Population

The student samples were nearly equal in terms of sexual composition. The distribution of males and females by program are as follows:

	Males	Females
Follow-Through Pupils	78 (51%)	75 (49%)
Project Read Pupils	28 (48%)	30 (52%)
Basal Reading Pupils	44 (55%)	36 (45%)
TOTAL	150 (52%)	141 (48%)
Follow-Through Leavers	12 (39%)	19 (61%)

The distribution of students in the programs by racial identification, however, was considerably different. This was as follows:

	White	Black	Chicano & Puerto Rican	Other
Follow-Through Pupils	28 (18%)	120 (78%)	5 (3%)	0
Project Read Pupils	1 (2%)	54 (93%)	1 (2%)	2 (3%)
Basal Reading Pupils	75 (94%)	2 (3%)	0	3 (4%)
TOTAL	104 (36%)	176 (60%)	6 (2%)	5 (3%)
Follow-Through Leavers	0	31 (100%)	0	0

The vast majority of the Basal Reading students are white (94%). A nearly equal proportion (93%) of the Project Read students are black. The large majority of the Follow-Through students are black (78%) and all of the Follow-Through Leavers are black.

Similar differences among programs were found in terms of the household composition of the homes in which the students lived. The following figures illustrate the differences in familial composition between the student samples:

	Pupils Enrolled In:				
Students Living With:	Follow-Through	Project Read	Basal Reading	Total Sample	Follow-Through Leavers
Both Parents	61 (40%)	24 (42%)	57 (71%)	142 (49%)	22 (71%)
Mother Only	63 (41%)	28 (49%)	15 (19%)	106 (36%)	8 (26%)
Mother & Stepfather	13 (9%)	3 (5%)	4 (5%)	20 (7%)	1 (3%)
Guardian	10 (6%)	2 (3%)	2 (3%)	14 (5%)	0
Father Only	4 (3%)	1 (2%)	1 (1%)	6 (1%)	0
Father & Stepmother	0	0	1 (1%)	1 (1%)	0
No Information	2 (1%)	0	0	2 (1%)	0

As may be seen in the above table, a slight minority of the Follow-Through and Project Read pupils live in homes in which both parents are present (40% and 42%). The majority of the Basal Reading student (71%) do live with both parents; this is also true of the Follow-Through Leavers, suggesting that they come from more stable homes than do the other inner-city pupils. A slight majority of the Follow-Through and Project Read pupils lives only with their mothers (41% and 49%). The majority of Basal Reading pupils and the Follow-Through Leavers live either with both original parents or with their original mother and a stepfather. Less than half of the Follow-Through and Project Read pupils live in homes in which either the original or a stepfather resides.

Again, there is a considerable difference between the student samples when socio-economic status levels, as indicated by levels of occupational prestige, are examined. The following figures indicate the distribution of social class origins as is indicated by the occupational prestige level of their fathers' employment:

	Pupils Enrolled In:				
Fathers' Occupation:	Follow-Through	Project Read	Basal Reading	Total Sample	Follow-Through Leavers
Professional, technical (includes teachers):	2 (1%)	0	2 (3%)	4 (1%)	1 (3%)
Business manager, official, proprietor:	5 (3%)	2 (3%)	7 (9%)	14 (5%)	1 (3%)
Skilled, craftsman, foreman, kindred worker, college student:	16 (10%)	6 (10%)	18 (23%)	40 (14%)	2 (6%)
Semi-skilled, clerical, sales worker, teacher aide:	9 (6%)	3 (5%)	2 (3%)	14 (5%)	0
Unskilled, service, domestic worker:	28 (18%)	15 (26%)	21 (26%)	64 (22%)	11 (35%)
Unemployed, relief:	6 (4%)	1 (2%)	2 (3%)	10 (3%)	1 (3%)
No Information:	87 (58%)	30 (52%)	28 (35%)	145 (50%)	15 (48%)

One of the more obvious shortcomings of the above data is the fact that the occupation of the father is simply unknown in nearly half of the cases; since almost half of the pupils live only with their mothers, however, this deficiency is not surprising. The existing data, however, does indicate that a proportionately higher number of Basal Reading pupils come from families in which the fathers have jobs ranking at the upper prestige levels than is so for the Follow-Through and the Project Read students. The fathers of the Follow-Through Leavers appear to be more fortunate in procuring employment than is so for the other inner city fathers.

Since approximately half of the students in the sample of this study live with their mothers, and since data cannot be obtained on the occupations of nearly half of the fathers, data were also collected on the occupational positions held by mothers. Their positions, ranked by occupational prestige levels, are as follows:

	Pupils Enrolled In:				
Mothers' Occupation:	Follow-Through	Project Read	Basal Reading	Total Sample	Follow-Through Leavers
Professional, technical, (includes teachers):	2 (1%)	0	1 (1%)	3 (1%)	0
Business manager, official, proprietor:	0	0	3 (4%)	3 (1%)	0
Skilled, craftsman, foreman, kindred worker, college student:	7 (5%)	3 (5%)	3 (4%)	13 (4%)	0
Semi-skilled, clerical, sales worker, teacher aide:	21 (14%)	8 (14%)	5 (6%)	34 (12%)	2 (6%)
Unskilled, service, domestic worker:	22 (14%)	14 (24%)	13 (16%)	49 (17%)	8 (26%)
Housewife:	55 (36%)	16 (28%)	42 (53%)	113 (39%)	9 (29%)
Relief, unemployed, ADC:	20 (13%)	7 (12%)	5 (6%)	32 (11%)	3 (10%)
No information	26 (17%)	10 (17%)	8 (10%)	44 (15%)	9 (29%)

Since the information available from the school records files is often obtained by eliciting self-reports from the parents, there is likely to be some degree of obfuscation. This is particularly likely to be the case with regard to the category of "Housewife"; it may be that many of those who claimed to be housewives are some kind of welfare recipients, but there is no easy way to check on the validity of these reports. It is apparent, however, that considerably more of the mothers of the Follow-Through and Project Read students are "working mothers" than is so for the mothers of the Basal Reading students.

If we do draw all of these data together, however, we can obtain some picture of the differences between the three groups of students. The Basal Reading pupils are much more likely to come from families in which both parents live together, in which the father has a better job, and in which the mother is more likely to be at home.

One other family characteristic should be assessed: the size of the family. The following figures illustrate the varying numbers of siblings in each family according to the program that the pupils are enrolled in:

	Pupils Enrolled In:				
Number of Siblings in Family:	Follow-Through	Project Read	Basal Reading	Total Sample	Follow-Through Leavers
None	7 (5%)	4 (7%)	3 (4%)	14 (5%)	0
One	11 (7%)	4 (7%)	9 (11%)	24 (8%)	5 (16%)
Two	20 (13%)	9 (16%)	21 (21%)	50 (17%)	6 (20%)
Three	27 (18%)	7 (12%)	22 (28%)	56 (19%)	9 (29%)
Four-Five	44 (29%)	24 (41%)	20 (25%)	88 (30%)	10 (32%)
Six-Eight	35 (23%)	6 (10%)	4 (5%)	45 (15%)	1 (3%)
Nine-Ten	4 (3%)	4 (7%)	0	8 (3%)	0
Eleven +	3 (2%)	0	0	3 (1%)	0
No information	2 (1%)	0	1 (1%)	3 (1%)	0

The Basal Reading pupils are reared in families that are somewhat smaller than is the case for the Follow-Through and the Project Read students. Again, the Follow-Through Leavers come from families which are generally smaller. Nearly 70% of the Basal Reading pupils come from families which have three or less children. Over half of the Project Read students (57%) live in families which have four or more chilren; the same is true for 58% of the Follow-Through pupils.

In summary, then, the differences between the three groups of children are considerable. The Basal Reading pupils, who are predominantly white, tend to come from smaller families, have fathers who have better jobs, and have mothers who are less likely to be working than is the case for the predominantly black pupils who are enrolled in Follow-Through and in Project Read. On the other hand, those black students who have been classified as "Follow-Through Leavers" come from families which are much more similar to those of the Basal Reading pupils.

In attempting to determine prospective differences among these students, the following criterion variables have been analyzed for the different samples and sub-samples:

	Purpose	Criterion	Sample
I.	To assess variations among early educational programs	Metropolitan Achievement Reading Test Scores	All Follow-Through, Project Read and Basal Reading students (total sample)
		Teachers' evaluations of reading performance as indicated by grades	All Follow-Through, Project Read and Basal Reading students (total sample)
II.	To assess variations among early experimental education programs	Wide Range Achievement Reading test scores	Students sampled from Follow-Through, Project Read and Follow-Through Leavers
		Stanford-Binet Intelligence test scores	Students sampled from Follow-Through, Project Read and Follow-Through Leavers
III.	To assess variations among Follow-Through students	Teachers evaluations of reading performance as indicated by grades	Total Follow-Through sample
		Stanford-Binet Intelligence test scores	Sub-sample of Follow-Through students
		Wide Range Achievement Reading test scores	Sub-sample of Follow-Through students

The results of each of these separate analyses are discussed in the following pages.

A. Metropolitan Achievement Reading Test Scores: The Impact of Educational and Social-Psychological Variables

During the second semester of the 1970-71 academic year, children first, second, and third year beyond kindergarten in the Grand Rapids elementary schools were administered the Metropolitan Achievement Test. While this test does assess pupil performance on a large number of relevant academic dimensions, the investigators singled out the area of reading as a criterion variable for this comparative evaluation of early educational programs. This was done because (1) much of the literature indicates the great importance of reading and its impact upon pupil performance in other areas, and (2) reading is the central concern of the educational programs under investigation.

It is the objective of this sub-section to examine the impact of various educational and social-psychological variables upon pupil performance as measured by their reading scores in the Metropolitan Achievement Tests. For ease of interpretation, the scores that the students received shall be reported in terms of grade-level rather than as percentile rankings or raw scores.

The AID program, as described in the Chapter on Methodology, has been employed to determine the extent to which school-related and other variables are associated with high and low levels of achievement in the reading tests.

Metropolitan reading test scores were collected for 282 second-year students. The number of subjects from each elementary program and their average scores on the reading tests are as follows:

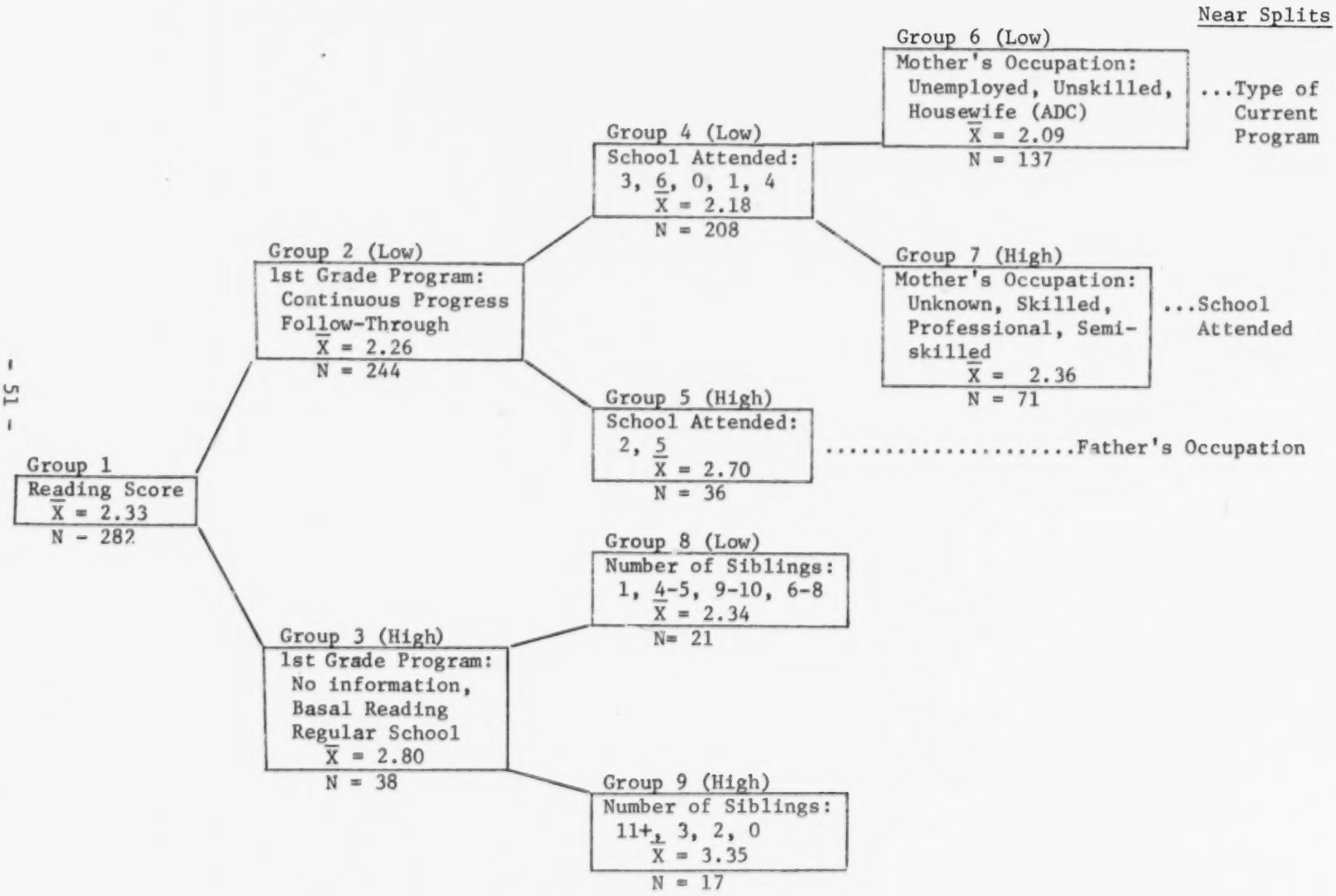
Follow-Through Pupils	N = 135	$\bar{X}$ = 2.38
Project Read Pupils	N = 48	$\bar{X}$ = 2.09
Basal Reading Pupils	N = 78	$\bar{X}$ = 2.33
Follow-Through Leavers	N = 21	$\bar{X}$ = 2.56

The number of subjects from each school and their average grade-level scores on the reading tests are as follows:

School 0	N = 39	$\bar{X}$ = 2.40
School 1	N = 69	$\bar{X}$ = 2.22
School 2	N = 21	$\bar{X}$ = 2.63
School 3	N = 79	$\bar{X}$ = 2.31
School 4	N = 19	$\bar{X}$ = 2.28
School 5	N = 15	$\bar{X}$ = 2.80
School 6	N = 40	$\bar{X}$ - 2.19

TABLE 4.1

Variables Accounting for the Most Variation In Metropolitan Reading Test Scores Among Early Educational Programs



In Table 4.1, the AID program has been used to describe which kinds of educational and social-psychological variables are of the greatest utility for accounting for the variations in reading test scores for the entire student sample.

Eleven different independent variables were entered into the statistical analysis in order to determine the relative strength of each one. These were as follows:

1. Program that student is currently enrolled in (Follow-Through, Project Read, or Basal Reading Program)
2. Sex (male or female)
3. Race (black, white, chicano, other)
4. Persons pupil lives with (original parents, step-parents, guardian, etc.)
5. Current marital status of parents
6. Father's occupation
7. Mother's occupation
8. Number of other children in the family
9. Program that student was enrolled in during first grade (Continuous Progress, Follow-Through, regular school, etc.)
10. Current school that the pupil attends
11. Absenteeism from school

Although data were collected for some of these students on Stanford-Binet Intelligence Test scores, Wide Range Achievement Test scores, and grade point averages, preliminary exploratory analyses indicate that these different kinds of criterion measures may assess the same dimension. When intelligence test scores, for example, were used to account for variations in achievement test scores, there was nothing further to explain - all of the variation could be accounted for with the single variable. Such an undertaking is similar to explaining one dependent variable with another, e.g., sexual status with gender identity. Therefore, each of these different criterion variables are examined separately and cannot be employed as independent variables.

As may be ascertained by examining Table 4.1, the mean grade-level score for all students in the sample who took the Metropolitan reading test was 2.33. With the use of the AID program, it was found that the single variable which accounted for the greatest amount of variation in test scores was that of the type of program that the student had while in the first grade. The mean scores were calculated for each respective program, indicating which subjects should be placed in high (Group 3) and low (Group 2) scoring categories.

Out of the eleven different independent variables which were entered into the AID analysis, four were found to be powerful enough to account for nearly all of the variation in the scores that the students attained on the Metropolitan reading test.[1] These four variables, in order of their relative strengths, are (1) the type of program that they had in the first grade, (2) the school that they attended during the 1970-1971 academic year, (3) the number of other children in their families, and (4) their mothers' occupations. As may be seen in Table 4.1, there were three other independent variables which were strong contenders in accounting for further variation in the test scores, but the differences among sub-categories were not great enough to justify creating subsequent high and low categories. The utility of these variables for accounting for variations in student reading scores is as follows:

First Grade Program

The greatest amount of variation in the reading test scores attained by the pupils was accounted for by the type of program that they were enrolled in during first grade. After calculating the mean scores for each type of first grade program, the pupils were split into the following high and low scoring groups:

Group 2 (Low Scores): As indicated in Table 4.1, the pupils in this group were enrolled in either the Continuous Progress Program or in Project Follow-Through. The mean score for this group indicates that these students read at a 2.26 grade level. The mean scores ranged from 1.70 to 2.38.

Group 3 (High Scores): The students in this group were enrolled in a regular school program, the Basal Reading Program, or else no information was available on their first grade level program (there were only eight cases in the latter category). The mean scores for these categories ranged from 2.57 to 2.95; the average grade level reading score for this group was 2.80.

There were 244 subjects in Group 2 and only 38 in Group 3. The nature of the characteristics of the sample (described earlier in this section) provides strong evidence that the children in Group 3 are white, from smaller families, and have parents with better occupational positions than is so for Group 2.

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[1] The variation is accounted for within certain limits established by the investigators. In this and the following analyses, a minimum of 12 subjects for each group was designated since the analysis of smaller groups has questionnable inferential value.

Number of Siblings

Group 3, the high scorers, could be further examined since there were 38 subjects in this category. It was found that variations in test scores within this group could be further accounted for by ascertaining the number of children in each family. After calculating the mean reading test scores for each size of family, the subjects were split into the following two groups:

> Group 8 (Low Scores): There were 21 children in this group; the average grade-level reading score was 2.34. These children tended to come from families in which the number of siblings ranged from four to ten. Since there are only 21 subjects in this group, no further meaningful statistical analysis can be undertaken.
>
> Group 9 (High Scores): The 17 pupils in this group had a mean grade-level score of 3.35. These children came from families that were either very large (eleven or more) or rather small (three or less). The small number of subjects in this group prevents any further analysis.

In accounting for high scores on the Metropolitan reading test, then, it can be said that those pupils from either very large or rather small families who attended a Basal Reading program or regular school program in the first grade made the better scores. As previously stated, these children are similar in terms of fathers' and mothers' occupations, racial identification (white) and family stability. Since these factors operate as constants for this group, the size of the family is perhaps the only characteristic which can be considered as a variable. For such children, then, the size of the family does have an impact upon their performance on reading tests.

School Attended

Group 2, the 244 lower scoring pupils, could also be further assessed. It was found that variations in reading test scores could be further accounted for by looking at which schools these children were enrolled in during the 1970-1971 academic year. After calculating the mean reading test scores for each school, the subjects could be split into high and low scoring groups on the basis of their school affiliation. These two groups are as follows:

Group 4 (Low Scores): The 208 pupils in this group attended schools 3, 6, 0, 1, and 4. The mean scores for the students in these schools who had not been accounted for with the previous variables ranged from 2.05 to 2.28. The mean reading score for this group was 2.18. The large number of subjects in this group permits further analysis.

Group 5 (High Scores): The 36 pupils in this group attended schools 2 and 5. The mean scores for the students in these two schools which had not been accounted for with previous variables were 2.63 and 2.80. The mean reading test grade-level score for this group was 2.70. As indicated in Table 4.1, the AID form of analysis attempted to split this group further on the basis of Fathers' Occupations; the difference between the mean scores for each occupational grouping, however, was not great enough to warrant the creation of additional groups.

This analysis indicates that children who attend high achieving schools can obtain reading test scores that are considerably higher than the total sample average score even though the first grade level programs that they were enrolled in tended to slightly reduce the scores of other students. Furthermore, students in high achieving schools tend to be somewhat influenced by their social class background as measured by Fathers' Occupational Prestige Levels.

The 208 students from the schools associated with lower achievement, however, can be examined further. It was found that variations in the test scores made by these students could be best accounted for in terms of the occupational prestige level of their mothers.

Mother's Occupation

When the independent variable of Mother's Occupation was used to account for high and low reading test scores for those students in the lower achieving schools, the 208 students in Group 4 were split into the following two groups:

Group 6 (Low Scores): The 137 pupils in this group had mothers who were either unemployed, on some type of relief, or who worked at unskilled jobs. The mean scores ranged from 1.20 to 2.14. The mean reading test grade-level score for this group was 2.09. The AID analysis indicated that the type of current reading program that the student was enrolled in (Follow-Through, Project Read, or Basal Reading) would be the next most likely variable for accounting for the remainder of the variation of the reading test scores. However, when the mean scores for each program were calculated, the differences were not large enough to justify the forming of additional groups.

Group 7 (High Scores): The 71 students in this group were found to have mothers who had skilled, professional or semi-skilled occupations; a few in this group also had mothers whose occupations could not be ascertained (it can be assumed that they were probably housewives). The mean scores for these sub-groupings ranged from 2.27 to 2.50. The average reading test grade-level score for this group was 2.36. The AID analysis indicated that the next most likely variable for explaining further variations in the test scores for this group was the school that they attended during the 1970-1971 academic year. However, when the mean scores were calculated for the pupils from each school, the differences were not great enough to justify additional high and low groupings.

This analysis, then, indicates that the type of current program (Follow-Through, Project Read or Basal Reading) begins to be a useful predictor of reading test scores attained in the Metropolitan Achievement Tests for those children who (1) have mothers who are unemployed or underemployed, (2) who are enrolled in generally under-achieving schools, and (3) were in first grade programs which tended to reduce their test scores this year. On the other hand, those pupils who had mothers working in more prestigeful occupations achieved a mean score that was slightly higher than that of the total sample even though they were in schools and had been in first grade programs which were associated with lower test scores.

Summary

The results of this analysis strongly suggest that the single most important variable for accounting for variations in Metropolitan Achievement Reading Test grade-level scores is that of the program in which the pupils were enrolled at the first grade level. The type of first grade program, however, is also strongly associated with other sociological and social-psychological characteristics. While the pupils in the Basal Reading and Regular School first grade programs had higher test scores, these children are also likely to be white and to come from more stable and more advantaged family backgrounds. In fact, these characteristics tend to be so constant with these children that the only other variable which can account for variations in their performance on the reading tests is that of the size of the families that they belong to.

For the remainder of the pupils, it was found that the variations in their reading test scores could best be accounted for by examining which schools that they attended during the 1970-1971 academic year. Those who attended higher achieving schools scored considerably higher than the mean grade-level reading score of the total sample. Those who went to lower-achieving schools still did quite well if their mothers were working in the more prestigious occupational positions. Although the type of current early educational program (i.e., Follow-Through, Project Read and Basal Reading) exerted some influence on the remainder of the subjects under investigation, the difference was not strong enough to justify subsequent analysis.

B. Teachers' Evaluations of Reading Ability: The Impact of Educational and Social-Psychological Variables

A second major criterion measure was employed to assess prospective differences in reading ability among the pupils enrolled in the different early educational programs under investigation, i.e., teachers' evaluations of reading. This was assessed by perusing student record files at the end of the academic year and collecting data on the grades that teachers assigned to their pupils for reading. Throughout the school system, the following grade point system was employed:

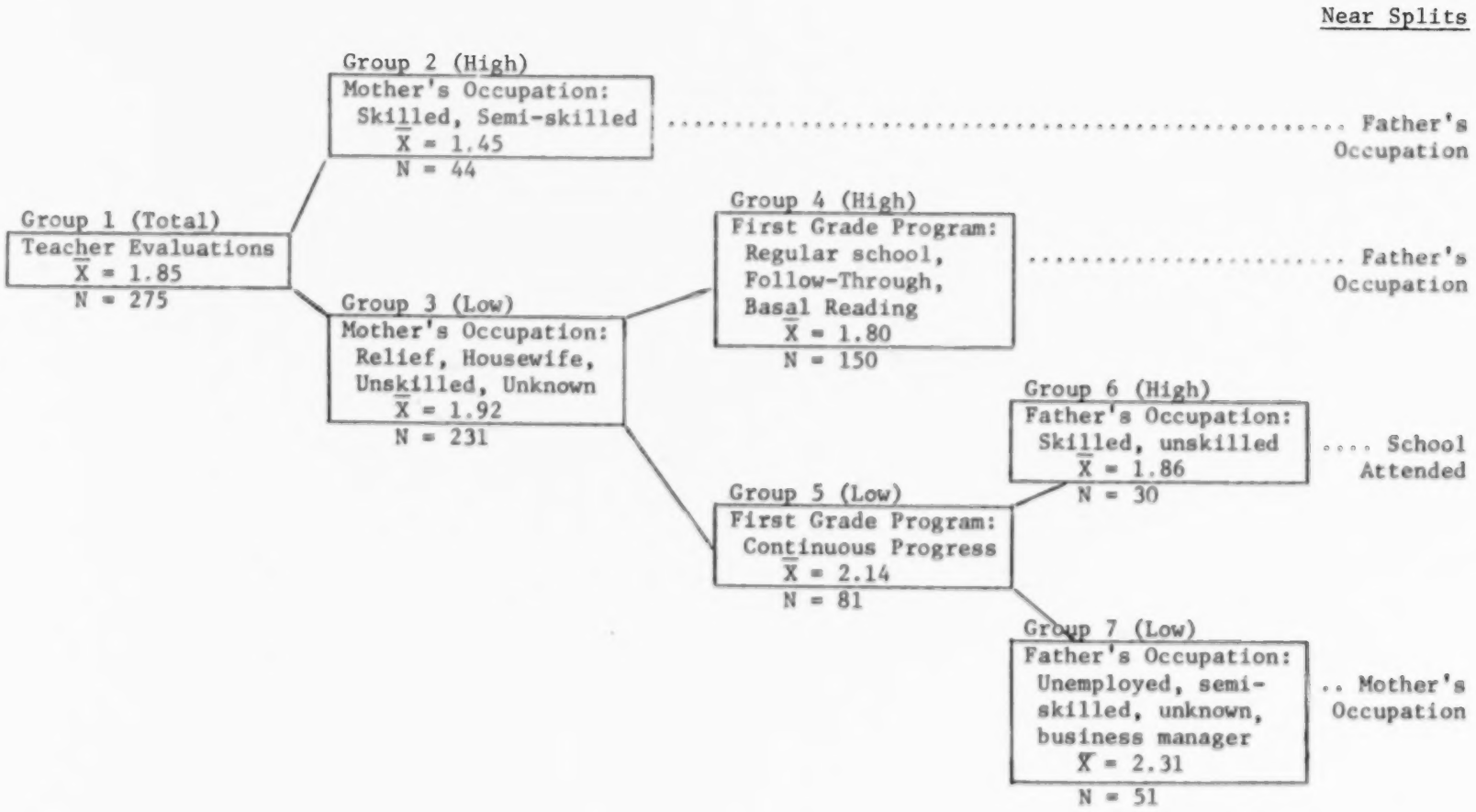
1 = Progressing Very Well
2 = Progressing Satisfactorily
3 = Progressing Slowly

Although some might question the validity of such a measure as an assessor of reading ability, few can question the impact that the assignation of grades to students has upon their academic careers.

In order to assess which kinds of educational and social-psychological variables can best account for the variations in the kinds of grades that students received for reading, the AID program was again employed. The same eleven independent variables

TABLE 4.2

Variables Accounting for the Most Variation in Teacher Evaluations of Pupils' Performance in Reading



were used in this analysis as were for examining variations in the Metropolitan Achievement Reading Tests.

The number of pupils from each program and the average grade which their teachers assigned to them for reading is as follows:

Follow-Through	N = 145	$\bar{X}$ = 1.73
Project Read	N = 52	$\bar{X}$ = 1.90
Basal Reading	N = 78	$\bar{X}$ = 2.03

The Follow-Through teachers tended to give their pupils slightly higher grades for reading than did the other two groups of teachers. There was some variation among schools as is indicated by the following figures:

School 0	N = 24	$\bar{X}$ = 1.62
School 1	N = 70	$\bar{X}$ = 1.81
School 2	N = 27	$\bar{X}$ = 1.74
School 3	N = 75	$\bar{X}$ = 2.05
School 4	N = 20	$\bar{X}$ = 1.90
School 5	N = 14	$\bar{X}$ = 1.57
School 6	N = 45	$\bar{X}$ = 1.82

The students in School 5 tended to get the best grades while those in School 3 received the lowest teacher evaluations of reading performance.

In Table 4.2, the AID analysis has been used to select those independent variables which have the greatest utility for accounting for the variations in the evaluations that the pupils received from their teachers. As may be seen, the average grade that all students received was 1.85, indicating that, as a whole, these students were seen by their teachers as reading at a level slightly better than "Satisfactory."

The AID program suggests that there are three major variables which account for most of the variation in the grades that the pupils received for their performance in reading. These are (1) mother's occupational prestige level, (2) the program that the pupils were enrolled in during the first grade, and (3) father's occupation. There were three strong contending independent variables which might have been of further use in accounting for variations in grades, but as will be explained, the differences in the mean scores were not great enough to justify further analysis. The importance of the major independent variables are as follows:

Mother's Occupation

The single independent variable which accounted for the most variation in the kinds of grades that teachers gave to their pupils was that of the mothers' occupational prestige levels. Mean scores were calculated for each occupational level and the subjects were split into the two following groups:

Group 2 (High Scores): The 44 pupils in this group had mothers who were employed in either skilled or semi-skilled occupational categories. The average grades received for reading were 1.41 and 1.60. The mean score for this group was 1.45. As may be seen in Table 4.2, the additional variable of Father's Occupation was suggested as a strong prospect for accounting for further variations; the difference in the mean scores for occupational categories, however, was not great enough to justify further groupings of the subjects.

Group 3 (Low Scores): The 231 students in Group 3 had mothers who were either on relief, housewives, worked at unskilled jobs, or whose jobs were not reported. The mean grades for this group ranged from 1.80 to 2.25. The mean grade achieved for the group as a whole was 1.92. The large number of subjects in this category permitted further statistical analysis.

This analysis suggests that the kinds of grades that a student receives for reading is most likely to be affected by the kind of job that his mother has. This single variable, in and of itself, accounts for nearly all of the higher grades that the teachers gave the students for reading.

Those who received lower grades from their teachers, however, can be further analyzed. The best single variable for accounting for variations in this group was the kind of program that the pupils were enrolled in during the first grade.

First Grade Program

The first grade program that the pupils were enrolled in accounted for the greatest amount of variation in reading grades that the 231 pupils in Group 3 received from their teachers. After calculating the mean grades for the students from each first grade program, the subjects were divided into the following two groups:

Group 4 (High Scores): The 150 pupils in this group had been enrolled in either a regular school program, Project Follow-Through, or in the Basal Reading Program. The mean scores for the students who had been in these

programs ranged from 1.75 to 1.85. The average reading score for the pupils in Group 4 was 1.80. Father's Occupation was indicated as a prospective variable for explaining further variations in this group; the mean scores for the various occupational categories, however, were not sufficiently different to allow for subsequent statistical analysis.

Group 5 (Low Scores): The 81 pupils in this group had been enrolled in a Continuous Progress Program during the first grade. The mean score for this group was 2.14. Further variations in the reading scores could be accounted for by examining the occupational prestige levels of their fathers.

This part of the analysis suggests that certain first grade programs are capable of enhancing children's reading performance as evaluated by their teachers even when their mothers are underemployed or unemployed. Of those students who had mothers with similar employment conditions and who attended first grade programs associated with underachievement, however, there are further variations in grades for reading which can be accounted for. The variable of Father's Occupation was found to be of the greatest utility.

Father's Occupation

Of the 81 students who were in Group 5, the variable of Father's Occupation was found to have the greatest strength for accounting for further variations in teachers' evaluations of reading performance. After calculating the mean reading grade for each occupational category, the following two groups were formed:

Group 6 (High): The 30 pupils in this group had fathers who were employed in either skilled or unskilled occupations. The mean scores for each occupational category were 1.66 and 1.72. The mean reading grade for Group 6 was 1.86. The AID program suggested that the next variable which might be of use for accounting for further variations might be that of the school attended in second grade; but after calculating the mean grades for each school, it was found that the differences were not great enough to justify additional groupings.

Group 7 (Low): The 51 pupils in this group had fathers who were unemployed, underemployed, or whose occupations were unreported. (Five of these children had fathers who were business managers or proprietors.) The mean grades for reading as associated for each occupational category ranged from 1.85 to 2.33. The mean grade received for this group was 2.31. The variable of Mother's Occupational Prestige Level was suggested as a prospect for explaining further variations in grades for reading, but the mean scores found for this variable were not sufficiently different to allow for further investigation.

This analysis that the social class origins of a student, as measured by Father's Occupational Prestige Level, has an impact on his ability to read as is evaluated by his teachers in the assignation of grades. Children from the higher social classes receive higher than average grades even when they have gone to first grade programs which are associated with future poorer grades and when their mothers are unemployed or underemployed.

Summary

This analysis suggests that the single most important variable for accounting for the kinds of grades that teachers give their pupils in reading is that of the Mother's Occupational Prestige Level. The influence of the family, then, has a much greater impact than does any of the other variables under examination, i.e., type of program, race, sex, size of family, etc.

There have been some studies on the impact of children's social origins upon teacher expectations and evaluations; perhaps this is the phenomenon which has been tapped in this particular analysis. Whatever the case, however, there is little reason to suspect that the type of program that a child is currently enrolled in affects teachers' grading of their pupils' reading performance. This may be interpreted as meaning that the teachers of black inner city children view their pupils and evaluate them in a manner very similar to that of the teachers of white children. In other words, the fact that the type of program (Follow-Through, Project Read and Basal Reading) has no utility for accounting for the kinds of grades that the teachers give their pupils for their reading performance implies that the inner city teachers, as compared to such teachers in other studies, evaluate their pupils in about the same manner as do fringe area teachers.

A second major variable of educational importance found to be of use in explaining variations in grades received for reading was that of the kind of program that the

children were enrolled in during the first grade. In this analysis, it was found that the children in the first grade Follow-Through Project fared just as well as did those white children from the Basal Reading and Regular School Programs.

C. Wide Range Achievement Test Scores: Accounting for Variations Among Experimental Programs

The Wide Range Achievement Test was individually administered to 104 second grade level pupils. In an attempt to assess whether different scores on the Wide Range Reading Tests might be associated with the different experimental programs and their effects, the following groups of students were analyzed: Follow-Through pupils, Project Read pupils, and Follow-Through Leavers (currently enrolled in regular school programs). The number of students in each program and their average grade-level reading test scores on the Wide Range Achievement Tests are as follows:

Follow Through Pupils	N = 70	$\bar{X}$ = 3.23
Project Read Pupils	N = 14	$\bar{X}$ = 3.00
Follow Through Leavers	N = 20	$\bar{X}$ = 3.20

The number of students from each school and their respective mean grade level reading scores are as follows:

School 0	N = 9	$\bar{X}$ = 3.04
School 1	N = 25	$\bar{X}$ = 3.45
School 2	N = 15	$\bar{X}$ = 4.16
School 3	N = 2	$\bar{X}$ = 2.45
School 4	N = 5	$\bar{X}$ = 3.02
School 5	N = 4	$\bar{X}$ = 2.60
School 6	N = 24	$\bar{X}$ = 2.70
Other Schools [1]	N = 20	$\bar{X}$ = 3.20

The AID program, as indicated in Table 4.3, was employed to determine which of the following independent variables were of the greatest utility in accounting for high and low grade level reading scores among those inner city children enrolled in experimental programs:

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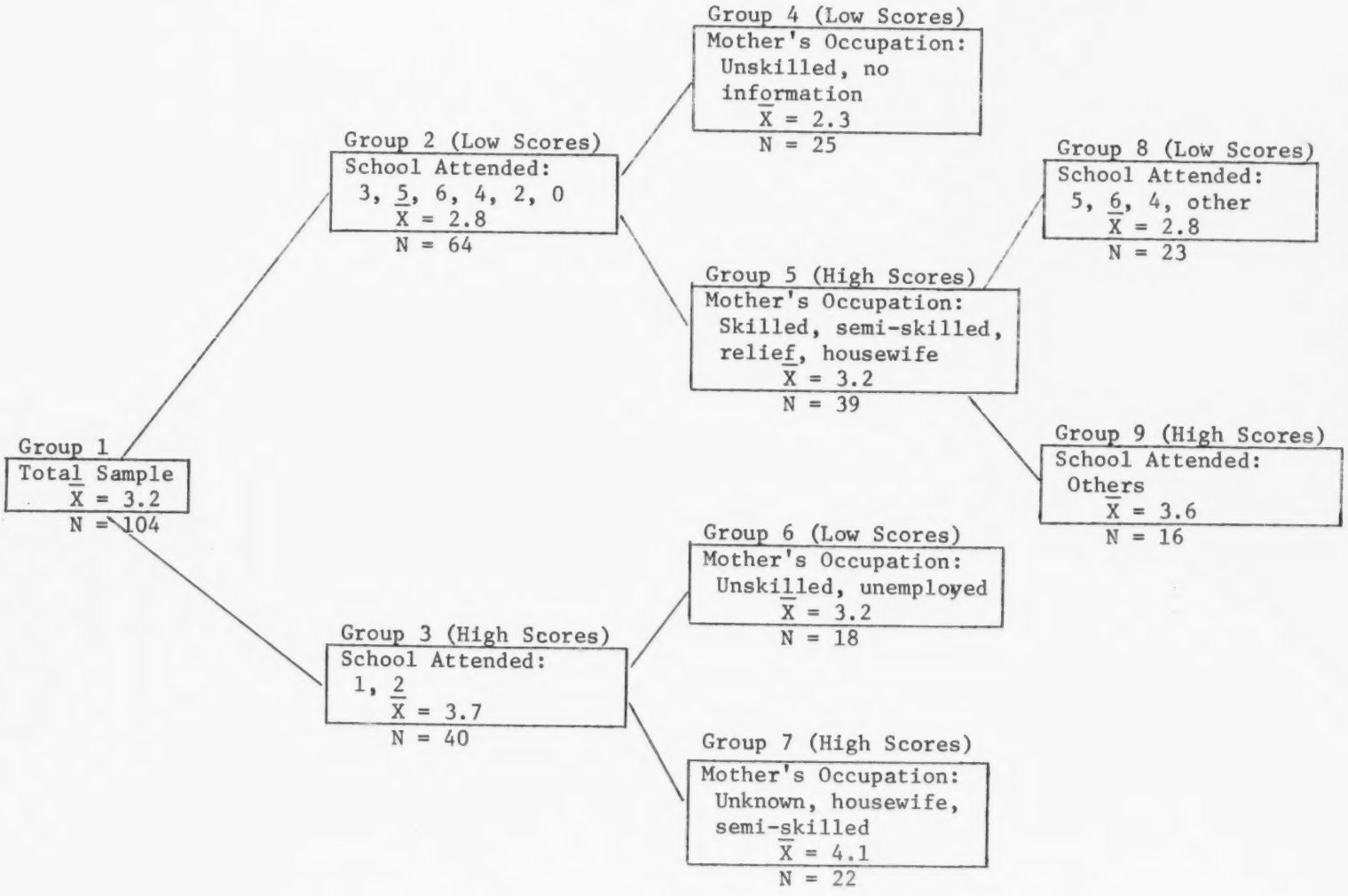
[1] Follow-Through Leavers were dispersed throughout the entire public school system.

TABLE 4.3

Variables Accounting for the Most Variation in Wide Range Achievement Scores Among Experimental Groups



1. Program Type (Follow-Through, Project Read, Follow-Through Leavers)
2. Sex
3. Adults the pupil currently lives with
4. Current marital status of parents
5. Father's Occupation
6. Mother's Occupation
7. Type of preschool program (Bereiter-Engelmann, Enrichment, or none)
8. Kindergarten level program (Engelmann-Becker, Regular, Other)
9. First grade level program (Engelmann-Becker, Regular, Other)
10. Absenteeism

As portrayed in Table 4.3, nearly all of the variation in the grade level reading scores attained by the students who took the Wide Range Achievement Tests could be accounted for by two major independent variables: School Attended during the second grade level and Mother's Occupational Prestige Level.

The total sample of 104 pupils attained a mean grade level reading score of 3.2 - these second grade level students, then, were reading at the third grade level as measured by this particular test.

When all of the independent variables were separately examined by the AID program, it was found that the single variable which accounted for the most variation in the scores received by these students was that of the school that they attended during the 1970-1971 academic year. It should be pointed out that schools 3, 4, 5 and 6 were poorly represented in this particular sampling description; bearing this limitation in mind, however, the analysis still serves to indicate the nature of the larger picture. Hence, the importance of the major independent variables for explaining variations in reading test scores is as follows:

School Attended

The AID analysis indicated that the school that the students attended in the second grade level was the most powerful variable for explaining variations in the reading test scores attained in the Wide Range Achievement Tests. After calculating the mean test scores for each school, the pupils were separated into the following two groups:

Group 2 (Low Scores): The 64 pupils in this group attended schools 3, 5, 6, 4, 2, 0, and others. (Schools 3, 5, and 4, however, were poorly represented in this sample.) The average grade-level reading score for this group was 2.8. It was found that further variations in the scores achieved by these students could be accounted for with the variable of Mother's Occupational Prestige Level.

Group 3 (High Scores): The 40 pupils in this group attended schools 1 and 2. They received an average grade-level reading score of 3.7. Further variations in reading scores achieved by these students could be accounted for by assessing the Occupational Prestige Levels of their mothers.

Mother's Occupation

The AID analysis demonstrated that the single independent variable for accounting for the variations in reading scores attained by both Groups 2 and 3 was that of the Mother's Occupational Prestige Level. Group 2, those students in schools associated with lower grade-level reading scores, were split into the two following groups:

Group 4 (Low Scores): The 25 students in this group had mothers who worked in unskilled occupations or else no information was available about their mothers. These students had a mean grade-level reading score of 2.3. No other independent variable was of any use in accounting for further variations in the scores received by these pupils.

Group 5 (High Scores): The 39 students in this group had mothers who held semi-skilled or skilled jobs, were on relief, or were housewives. The average grade-level score for these pupils was 3.2. It was found that further variations among the scores attained by this group could be accounted for by once again determining the schools that they attended. Of this group of students, 23 (Group 8) attended schools 5, 6, and 4 and received a lower average score of 2.8 (although schools 5 and 4 were not well represented in the sample). This group also includes the Follow-Through Leavers. Again, 16 of these 39 students (Group 9) achieved a high score of 3.6 (these attended school 0 or were Follow-Through Leavers).

Group 3 could also be split into two more groups based upon Mother's Occupation. These two groups were as follows:

Group 6 (Low Scores): The 18 students in this group had mothers who were either unemployed or underemployed. The average grade-level reading score for this group was 3.2. No further variation in test scores could be accounted for by any additional independent variables since the number of subjects in this group is not sufficient for further analysis.

Group 7 (High Scores): The 22 subjects in this group had mothers who were housewives, worked in semi-skilled jobs, or whose occupation was unknown or unrecorded. This group attained an average grade-level reading score of 4.1. It was found that no additional variation in test scores could be accounted for with further analysis.

Summary

In an analysis designed to account for variations in grade-level scores attained in the Wide Range Achievement Reading Tests by Follow-Through and Project Read students as well as Follow-Through Leavers, it was found that the greatest amount of the variation could be accounted for by determining which schools these students attended during the 1970-1971 academic year (second grade level). Further variations in scores attained by students in schools associated with either high or low achievement could be accounted for by determining the occupational prestige levels of their mothers. Students enrolled in the high achieving schools were reading at the third grade level even though their mothers were unemployed or underemployed. Students in high achiving schools whose mothers were housewives or who had unskilled jobs were reading at the fourth year level.

Students enrolled in schools associated with lower achievement and who had mothers working in less prestigious occupations scored at about the second grade reading level.

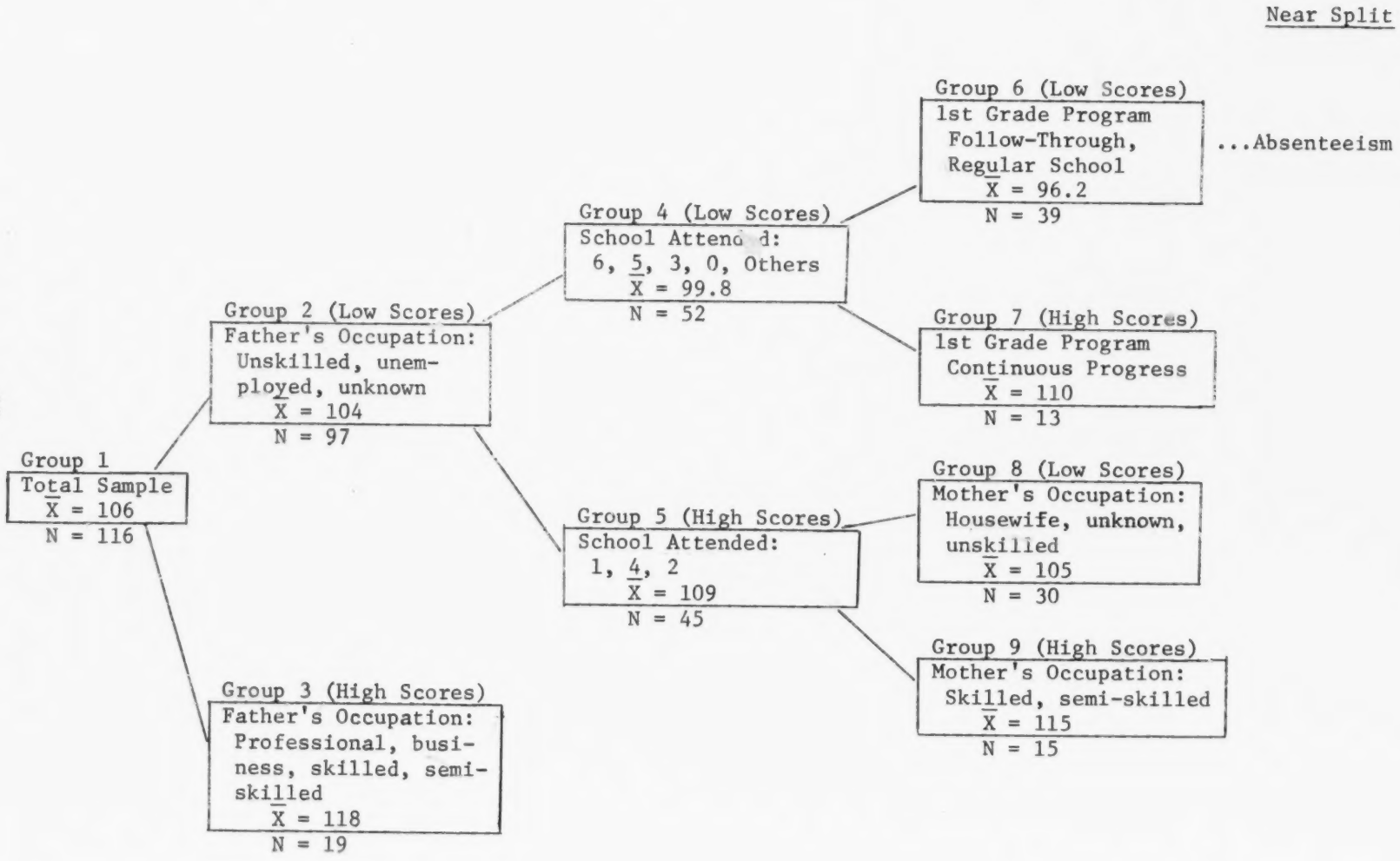
This analysis once again suggests that the type of school that a student attends has a great impact upon his reading performance. The type of program that he participates in does not appear to be a salient factor. The influence of family background upon a student's reading performance is great: good schools appear to be able to surmount this factor while other schools do not.

D. Stanford-Binet Intelligence Scores: Accounting for Variations Among Experimental Programs

The Stanford-Binet Intelligence Test was individually administered to 116 second grade level students enrolled in Project Follow-Through, Project Read, or who had been in Follow-Through and had moved to another location (Follow-Through Leavers). The number of students in each category and their average scores on the Stanford-Binet Intelligence Tests are as follows:

TABLE 4.4

Variables Accounting for the Greatest Amount of Variation in Stanford-Binet Intelligence Test Scores Attained by Students Enrolled in Experimental Educational Programs



Follow-Through Pupils	N = 79	$\bar{X}$ = 105
Project Read Pupils	N = 15	$\bar{X}$ = 111
Follow-Through Leavers	N = 22	$\bar{X}$ = 106

The number of students from each school and their respective mean scores are:

School 0	N = 11	$\bar{X}$ = 104
School 1	N = 28	$\bar{X}$ = 111
School 2	N = 21	$\bar{X}$ = 112
School 3	N = 2	$\bar{X}$ = 104
School 4	N = 6	$\bar{X}$ = 107
School 5	N = 4	$\bar{X}$ = 98
School 6	N = 22	$\bar{X}$ = 99
Other Schools[1]	N = 22	$\bar{X}$ = 106

Eleven independent variables were selected for use in the AID analysis in order to determine which ones were of the greatest utility in accounting for variations in the scores that the students achieved on the intelligence measure. These were as follows:

1. Program type (Follow-Through, Project Read, Follow-Through Leavers)
2. Sex
3. Adults the student currently lives with
4. Current marital status of parents
5. Father's Occupation
6. Mother's Occupation
7. Preschool program (Bereiter-Engelmann, Enrichment, None)
8. Kindergarten level program (Engelmann-Becker, Regular, Other)
9. First grade level program (Engelmann-Becker, Regular, Other)
10. School Attended during second grade level
11. Absenteeism

As indicated in Table 4.4, there were four major independent variables discerned with the AID analysis which accounted for most of the variation in the scores that the students obtained on the Stanford-Binet Intelligence Tests. These were (1) Father's Occupational Prestige Level, (2) School Attended during the 1970-1971 academic year, (3) Program Attended during the first grade, and (4) Mother's Occupational Prestige Level.

In Table 4.4, the results show that the 116 students who were tested obtained an average intelligence test score of 106. Using the AID analysis, it was found that

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[1]Follow-Through Leavers were dispersed throughout the entire public school system.

the occupational prestige level of the father was the single most powerful variable for accounting for variations in high and low scores received by the total sample. The importance of this variable is as follows:

Father's Occupation

The occupational prestige level of the father, a variable commonly employed to indicate socio-economic status positions, accounted for the greatest amount of variation in high and low scores received by the subjects under investigation. After calculating the mean intelligence test scores for each occupational position category, the total sample was divided into the following two groups:

Group 2 (Low Scores): The 97 students in this group had fathers who were in unskilled occupations, who were unemployed, or whose occupations were not known. The mean intelligence test scores associated with these categories ranged from 97 to 108. The average test score for this group was 104. It was found that further variations in the test scores for this group could be accounted for by examining the schools that the different pupils attended in the second grade.

Group 3 (High Scores): The 19 students in this group had fathers whose occupations could be classified as being professional, business, skilled or semi-skilled. The average intelligence test scores for these categories ranged from 114 to 126. The average score for the total group was 118. Since there were only 19 subjects in this category, additional statistical analysis could not be conducted.

School Attended

Of the 97 students whose fathers had lower occupational prestige levels, further variations in intelligence test scores could be accounted for by examining which schools the students were enrolled in during the 1970-1971 academic year. After the average scores were calculated for each school, the following two groups were formed:

Group 4 (Low Scores): The 52 students in this group attended schools 6, 5, 3, 0, and Others (Others = Follow-Through Leavers). Schools 5 and 3, however, are under-represented in this sample and these findings should not be viewed as definitive. The intelligence test scores for these schools ranged from 97 to 102 for this group of children. The average test score for this group was 99.8. Further variations among the scores attained by these students could be accounted for by determining which kinds of programs they were enrolled in during the first grade.

Group 5 (High Scores): The 45 students in this group attended schools 1, 4, and 2 (school 4 was under-represented in the sample). The test scores for the students from these schools averaged from 108 to 109; the average test score for the group was 109. Further variations in the test scores attained by this group of pupils could be accounted for by examining the occupational prestige levels of their mothers.

This section of the analysis suggests that some schools are able to overcome the effects of lower socio-economic status levels as measured by the occupational prestige of the father. Some schools, for example, are able to exert an impact on the children of unemployed and underemployed fathers as is demonstrated by the fact that these children can obtain intelligence test scores that are higher than that of the total sample. Other schools, however, do not appear to be quite as successful. Additional variations in the test scores for those children enrolled in the lower-achieving schools could be accounted for by discerning the kinds of programs that they were enrolled in during first grade.

First Grade Program

It was found that the determining of the type of program that the students attended during the first grade (Follow-Through, Continuous Progress, or Regular School) was the most powerful variable for accounting for further variations in the test scores received by the 52 students in Group 4. After calculating the mean scores for each type of first grade program, the following two groups were formed:

Group 6 (Low Scores): The 39 students in this group had been enrolled in either Project Follow-Through or in regular school during the first grade. The mean scores by type of program ranged from 89 to 97. The average intelligence test score attained by this group was 96.2. The AID analysis indicated that further variations in test scores might be accounted for by the variable of absenteeism; the differences in the mean scores associated with variations in absenteeism, however, were not great enough to warrant further analysis.

Group 7 (High Scores): The 13 students in this group had attended a Continuous Progress Program during the first grade. The average score that this group made on the intelligence tests was 110. Thus, these few students were able to obtain scores higher than the average of the total sample even though they attended schools associated with lower performance and had fathers who were unemployed or underemployed.

Mother's Occupation

Group 5, i.e., those from lower socio-economic backgrounds who attended higher achieving schools, could be further analyzed on the basis of the occupational prestige levels of their mothers. After calculating the mean intelligence scores for each type of occupational level, the following two groups were formed:

Group 8 (Low Scores): The 30 pupils in this group had mothers who were housewives, who worked at unskilled jobs, or whose occupations were unreported. The mean scores associated with each of these positions ranged from 102 to 108. The average score attained by the total group was 105. No further analysis could be conducted, for nearly all of the variations in the scores attained by this group had been accounted for.

Group 9 (High Scores): The 15 subjects in this group had mothers who worked at skilled or semi-skilled occupations. The mean scores for each category ranged from 111 to 126. The average score for the total group was 115, a score nearly as high as those children from higher socio-economic status levels.

Summary

In this analysis of the Stanford-Binet Intelligence Test scores which were made by children enrolled in Project Follow-Through, Project Read, and by those who had been in Follow-Through and had left, it was found that the single variable of Father's Occupation was of the most utility in accounting for the variations in the scores that were attained. Social class, then, overrides the effects of the experimental programs. Knowing that fathers are employed in the more prestigious occupations accounts for a high proportion of high intelligence test scores.

On the other hand, students from lower socio-economic positions are influenced by the kinds of schools that they attend. Some schools are able to enhance the scores that such students attain on intelligence measures while others appear less able to do so. Those students in schools associated with lower test scores appear to be further influenced by the type of program that they had in the first grade; those in schools associated with higher performance seem to be more affected by their families.

E. Intelligence Scores: Explaining Variations Within the Follow-Through Program

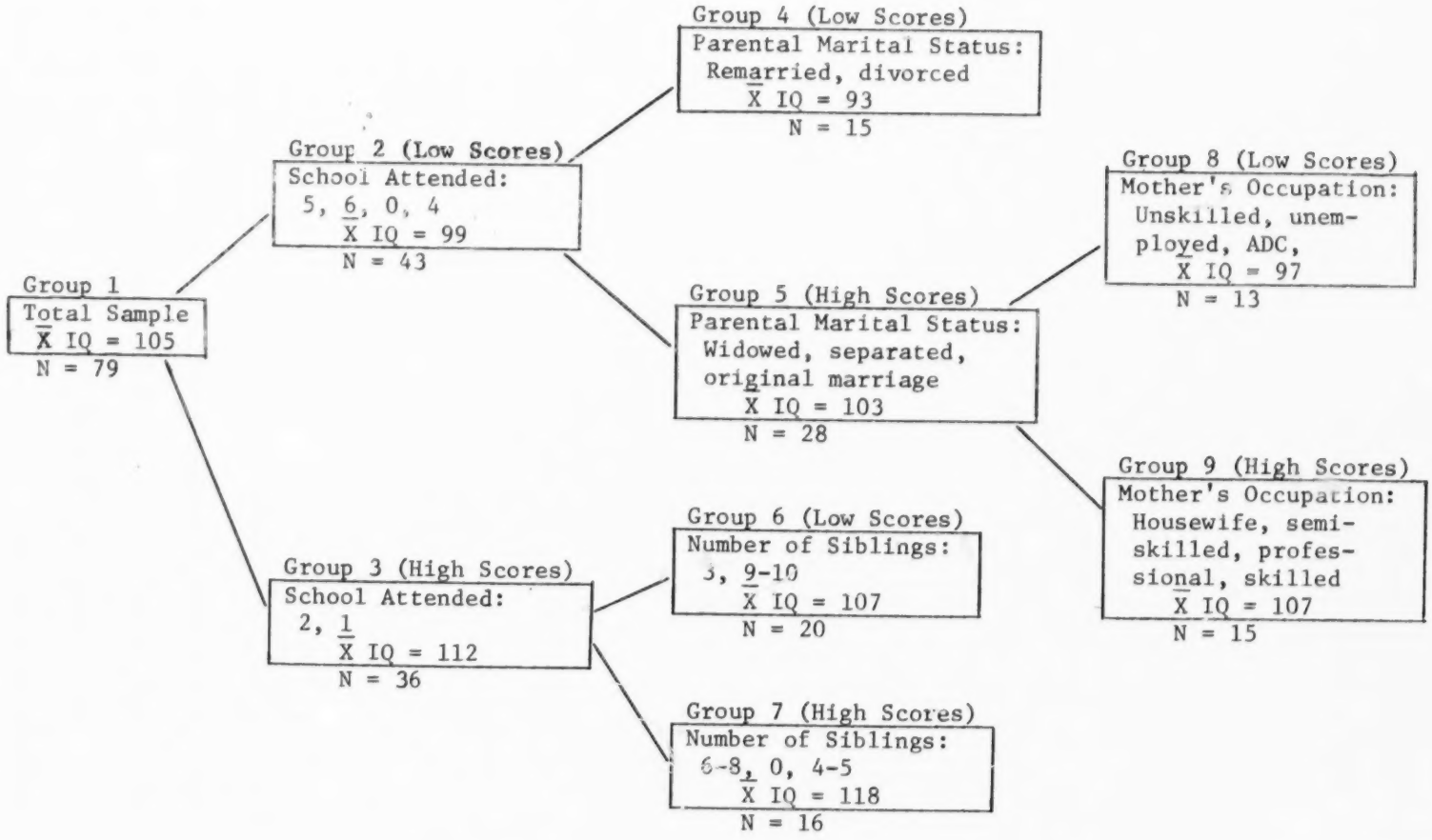
Given that differences can be found among various kinds of early elementary programs, and given that a specific program has been found to be successful, there are still questions that must be answered. If an experimental program, administered to a large variety of pupils in a number of different schools, is found to be successful, we must ask, why? What are the reasons for variations in the scores that the children achieve in a specific program? Do the different kinds of schools exert a differential impact? Are children from broken homes or large families affected more or less than children from smaller and more stable families? Do girls respond more favorably than do boys? To what extent does a child's social class background, as measured by parental occupational prestige levels, account for the kinds of scores that he is likely to make on a specific criterion variable? These are the kinds of questions that were addressed in assessing the performance of the students in Project Follow-Through. To find the answers, the AID program, as discussed in the section on Analysis of Data found in the chapter on Methodology, was employed. The results, using student scores on individually administered Stanford-Binet intelligence measures as a dependent variable, are presented in Table 4.5.

First, it may be seen that for the 79 Follow-Through pupils who were tested, the average score on the Stanford-Binet test was 105. The AID program was utilized to assess the relative strengths of each of the following independent variables for explaining the greatest amount of variation in the intelligence test scores:

1. Sex
2. Adults with whom the pupils resides
3. Parents' marital status
4. Fathers' occupation
5. Mothers' occuptaion
6. Number of siblings in the family
7. The school in which the pupil is currently enrolled
8. Absenteeism from school

TABLE 4.5

Variables Accounting for the Most Variation in Stanford-Binet Intelligence Scores Among Follow-Through Pupils



While data were collected on other relevant variables, e.g., racial identification, previous educational programs, etc., the Follow-Through pupils were so similar along these dimensions that these kinds of characteristics can be considered as constants. Out of the eight different independent variables which were entered into the AID analysis, four were found to be powerful enough to explain nearly all of the variations in student intelligence test scores.[1] These four variables, in order of their relative strengths, are: (1) school attended, (2) parental marital status, (3) number of children in the family, and (4) mother's occupation. The utility of these variables for explaining various kinds of pupil performance is as follows:

School Attended

The greatest amount of the variation in student intelligence test scores was explained by examining the schools that the pupils attended. After calculating the mean scores for each school, the pupils were split into the following two groups:

> Group 2 (Low Scores): As indicated in Table 4.5, the students in this group attended schools 5, 6, 0, and 4. These 43 pupils had an average intelligence test score of 99. In order of magnitude, the mean scores for each school ranged from 97 for school 5 to 102 for school 4.
>
> Group 3 (High Scores): The 36 pupils in this group, who attended schools 2 and 1 had an average score of 112. In school 2, the mean score was 111 while school 1 had an average score of 113.

The single independent variable of "School Attended", however, was not sufficient in accounting for all of the variation in scores. Therefore, Groups 2 and 3 were subjected to further analysis. It was found that the variables necessary for explaining variations in Group 2 test scores did not apply to Group 3.

Parental Marital Status

The current marital status of the pupils' parents was found to be the strongest explanatory variable for accounting for the variation in intelligence scores for

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[1] The investigators established a minimum of 12 subjects for each sub-group. It is assumed that any statistical analyses of smaller groups would not be amenable to interpretation.

Group 2, i.e., those students in the lower-achieving schools. After calculating the mean intelligence test scores associated with each category of marital status, the pupils in Group 2 were split into the following two groups:

> Group 4 (Low Scores): The 15 children in this group came from families in which the parents are either divorced or have married partners other than the child's original biological parents. Children from remarried parents scored a mean of 77; those from divorced parents averaged 95. The mean intelligence test score for this group was 93. Since only 15 subjects fell in this category, no further analysis can be meaningfully conducted with this group.
>
> Group 5 (High Scores): The 28 pupils in this group came from families in which the original parents were still married, or they were widowed or separated. Children who had both parents had an average score of 104; the mean scores were 101 and 99 for those whose parents were separated and widowed. The average intelligence score for this group of students was 103. Since there were 28 subjects falling in this category, further statistical analysis may be conducted with this group. This is discussed subsequently under the heading of Mother's Occuptaion.

Number of Siblings

As mentioned earlier, the 36 pupils enrolled in schools 1 and 2 made higher average scores on the intelligence tests than did those in the other schools. For this group, a different variable had to be employed to explain the variations in the test scores, i.e., the number of other children in the family. The mean test scores were calculated for each size of family and the pupils were separated into the following groups:

> Group 6 (Low Scores): The mean score for this group was 107, an average that was higher than the total sample mean of 105. It appears that these children live in households that have either very few or very many children. The mean scores, according to the number of siblings, ranged from 96 to 110.
>
> Group 7 (High Scores): These children, in comparison to those in Group 6 lived in households with an intermediate number of siblings (from 4 to 8). The mean score for this group was 118.

It is not immediately apparent just why the number of siblings in a family should have an impact upon those pupils who are enrolled in "high achieving" schools. According to the analyses, those from small families (0-3) and those from large families

(9 or more) do not seem to do as well as those children from families with an intermediate number of siblings (4-8). Since the number of children in each of the two groups approximates the lower limits established for analysis, no further meaningful approaches are justifiable. It can only be concluded that the number of brothers and sisters that a student has does have some impact upon his performance on an intelligence test.

Referring back to Group 5, which contained 28 subjects, an additioanal analytical approach was undertaken to further explain variations in this group. The results were as follows:

Mother's Occupation

The strongest variable for explaining variations in test scores among the 28 children in Group 5 was the occupational position of the mother. The mean scores were calculated for each prestige level of occupational positions and the following two groups were formed:

Group 8 (Low Scores): The 13 children in this group had an average intelligence test score of 97. Their mothers were found to be on some type of relief, unemployed, or in unskilled occupational positions. The mean scores for each type of mother's occupation ranged from 93 to 100.

Group 9 (High Scores): The 15 pupils in Group 9 had a mean score of 107. Their mothers held skilled, professional, or semi-skilled occupations or else they were housewives. The test score means for each sub-category ranged from 104 to 116.

Summary

The results of this analysis strongly indicate that the single most important variable for explaining variations in scores on Stanford-Binet Intelligence Tests is that of the school is which the pupil is enrolled. For this group of 79 Follow-Through pupils, the school that they attend has a much greater impact upon their performance than does any other variable assessed in this project. For students who

attend what might be referred to as "high achieving schools", the size of the family that they live in has an additional impact upon their performance - although the reason for this is not altogether clear.

The Follow-Through pupils enrolled in the lower achieving schools are much more affected by the current marital status of their parents. Those children from families in which the parents are divorced or remarried (perhaps indicative of conflict and dissension) do not score as high as those from families characterized by stability, the death of a single parent, or the separation of parents. The latter group is further influenced by the occupational position of the mother. Those children whose mothers have more prestigeful jobs or who are housewives, do better on the intelligence tests than is so for those who have mothers that are on relief, unemployed, or who work in unskilled jobs.

In summary, although the familial situation of each student exerts a considerable impact upon his performance on intelligence measures, the school that he attends has a much more profound influence. Students in low achieving schools can still do quite well, providing they have the appropriate family background. Students in high achieving schools seem to receive high scores no matter the condition of their familial background.

F. Teachers' Evaluations of Reading Ability: Accounting for Variations Within Project Follow-Through

As established in a previous section, the variations in the grades that teachers give their pupils for reading could not be accounted for by the type of program that the pupils were enrolled in. As has been discussed, the single variable which proved to be of the most utility was that of Mother's Occupational Prestige Level: children who had mothers employed in the more prestigious occupations received better grades

in reading than did those whose mothers were unemployed or underemployed. This finding obtained for all second grade students, irrespective of the program in which they were enrolled.

Since one of the major objectives of this evaluation is that of discerning which kinds of social factors may account for variations in success and failure among students in Project Follow-Through, we have taken a closer look at the impact of certain educational and social-psychological variables upon the grades that these pupils received in reading. The grades that they were assigned at the end of the year were: 1 = Progressing Very Well; 2 = Progressing Satisfactorily; and 3 = Progressing Slowly. As previously established, the Follow-Through students had a mean grade point average of 1.73 in reading. The independent variables which were used in the AID analysis were:

1. Sex (male or female)
2. Race (black, white, chicano, other)
3. Adults that the child currently lives with (original parents, step-parents, guardians, etc.)
4. Current marital status of parents (widowed, divorced, remarried, etc.)
5. Father's Occupational Prestige Level
6. Mother's Occupational Prestige Level
7. Number of siblings in the family
8. School attended during the second grade level
9. Absenteeism

The mean grade point averages for reading that the students from each school received were as follows:

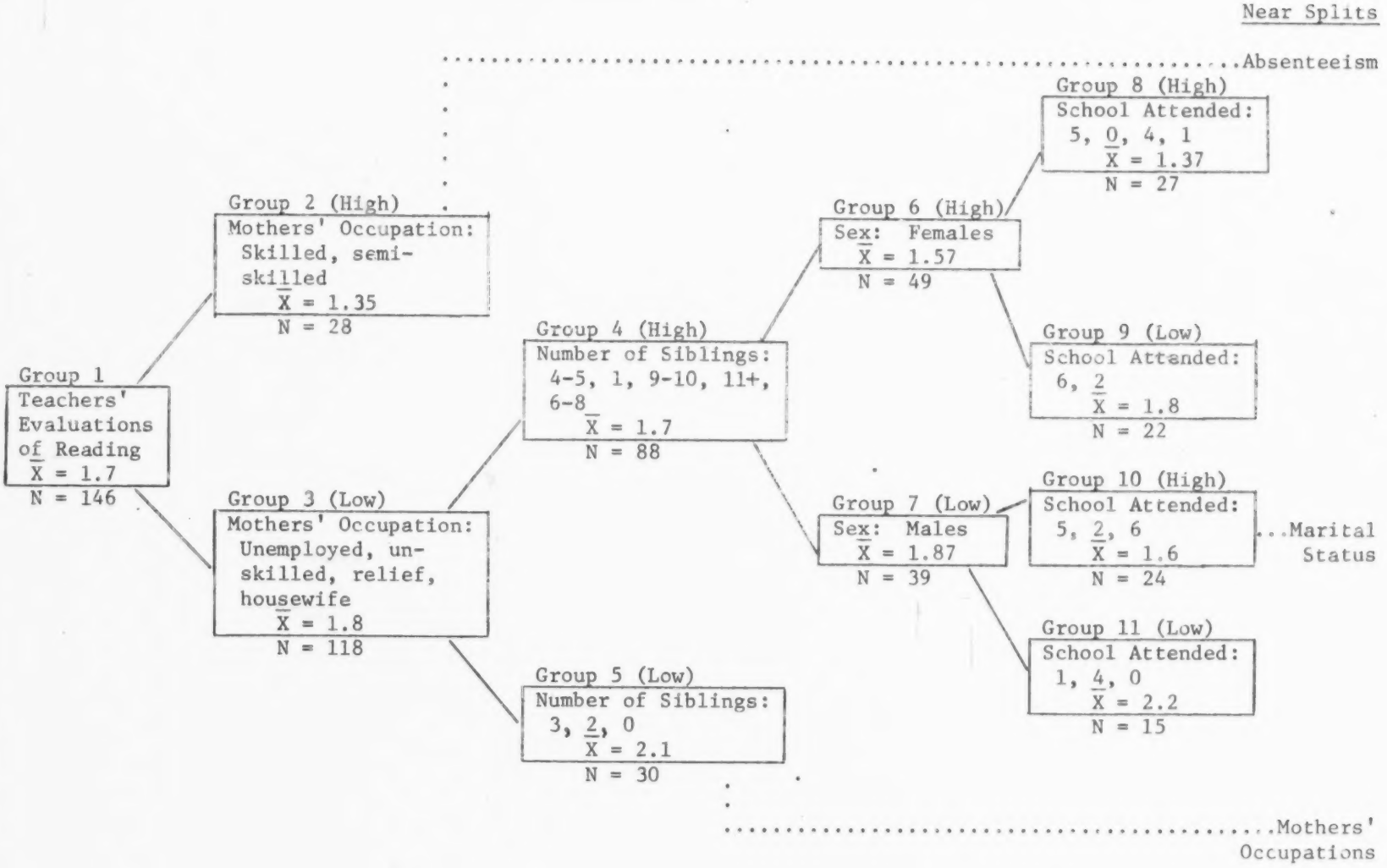
School 0	N = 17	$\bar{X}$ = 1.70
School 1	N = 18	$\bar{X}$ = 1.77
School 2	N = 21	$\bar{X}$ = 1.81
School 3	N = 0	(Basal Reading students only)
School 4	N = 14	$\bar{X}$ = 2.07
School 5	N = 13	$\bar{X}$ = 1.46
School 6	N = 35	$\bar{X}$ = 1.88

The students in school 5 received the highest mean grade for reading while those in school 4 had the lowest average.

In Table 4.6, the AID analysis has been employed to select those independent variables which have the greatest utility for accounting for the variations in the

TABLE 4.6

Variables Accounting for the Greatest Amount of Variation in Teachers' Evaluations of Follow-Through Pupils Performance in Reading



reading evaluations that the teachers gave their pupils. The AID analysis suggests that there are four major independent variables which account for most of the variation in the grades that the Follow-Through pupils received in reading. These are: (1) Mother's Occupational Prestige Level, (2) Number of siblings in the family, (3) Sex of the student, and (4) School attended during the second grade-level. As indicated in the column entitled "Near Splits" in Table 4.6, there were three additional variables suggested by the AID program which might have accounted for further variation (Absenteeism, Parental marital status, and Mother's Occupation) but, as shall be discussed, the differences in mean scores as associated with subcategories were not great enough to justify further groupings necessary for additional analysis.

The importance of the major independent variables in accounting for high and low grades received in reading are as follows:

Mother's Occupation

The kinds of grades that the Follow-Through pupils received in reading were most successfully accounted for by examining the occupational prestige levels of their mothers. Mean scores were calculated for each occupational level and the subjects were divided into the following high and low achieving groups:

> Group 2 (High Scores): The 28 pupils in this group had mothers who worked in skilled or semi-skilled occupational categories. The average grades received for reading according to categories were 1.33 and 1.42. The mean reading grade for this group was 1.35. As indicated in Table 4.6, the variable of Absenteeism was suggested by the AID program as a prospect for accounting for further variations in grades; the mean scores for each category, however, were not great enough to warrant further groupings for analysis.
>
> Group 3 (Low Scores): The 118 pupils in this group had mothers who were generally underemployed or unemployed (the exact source of income for those who claimed to be "housewives" is not readily ascertainable). The means of the grades received in reading ranged from 1.69 to 2.00 by occupational category. For Group 3, the mean grade was 1.8. The large number of subjects in this group permits further statistical analysis.

This analysis strongly suggests that the employment status of the mother has a great impact upon a student's reading performance as may be evaluated by his teacher.

In fact, this single variable accounts for nearly all of the higher grades which were received by the Follow-Through pupils. Although the AID analysis suggested that the variable of Absenteeism was a prospect for accounting for further variations among the high scoring group, the variations in reading grades as associated with the extent of absenteeism were not great enough to justify further analysis.

The lower scoring group, i.e., those who had unemployed and underemployed mothers, could be further analyzed. The best single variable for accounting for high and low grades among this group concerned the number of siblings in their families.

Number of Siblings

It was found that for those children who had unemployed or underemployed mothers, variations in high and low reading grades could be accounted for by assessing the number of other children in their families. After calculating the mean grades for reading associated with each category of size of family, the following groups were formed:

> Group 4 (High Scores): The 88 pupils in this group came from families in which there was only one other sibling or from families in which there were from four to over eleven other children. The mean scores ranged from 1.50 to 2.00 according to each subcategory; the average grade for reading for this group was 1.7, i.e., the same as for the total sample. Since there were a large number of subjects in this group, further statistical analysis was permitted.
>
> Group 5 (Low Scores): The 30 pupils in this group came from rather small families (three or less). For the family-size categories, the mean reading grades ranged from 2.00 to 2.25. The mean reading score for this group was 2.1. The AID program suggested that further variations in the grades received in this group of pupils might once again be accounted for by examining Mother's Occupation: when the mean scores were calculated for each subcategory, however, the differences were not great enough to warrant additional grouping for analysis.

In this analysis, children from smaller families who had mothers who were unemployed or underemployed did not receive reading grades as high as those children from larger families and whose mothers held the same types of occupational positions. It was found that variations in reading grades among the latter group could be further accounted for by determining the sex of each student.

Sex

It was found that the variable of sexual status was of the most utility in accounting for high and low reading grades for those Follow-Through students who came from large families and whose mothers were unemployed or underemployed. After calculating the mean reading grades for both boys and girls, the following two groups were formed:

Group 6 (High Scores): The 49 subjects in this group are females. They attained an average grade in reading of 1.57. The AID analysis indicated that further variations in reading grades among these girls could be accounted for by determining which schools they were enrolled in.

Group 7 (Low Scores): The 39 subjects in this group were boys. They received an average grade in reading of 1.87. It was found that further variations in reading grades for these boys could also be accounted for by determining which schools they attended.

School Attended

Further variations in reading grades for both boys and girls from large families in which the mothers were unemployed or underemployed could be accounted for by examining which schools the subjects were enrolled in during the second grade level. After calculating the mean reading grades for each school, the following groups were formed:

Group 8 (High Scoring Females): The 27 girls in this group attended schools 5, 0, 4, and 1. The average reading score for this group was 1.37, i.e., an average grade that was equal to that of those pupils whose mothers were employed in skilled and semi-skilled occupations.

Group 9 (Low Scoring Females): The 22 girls in this group attended schools 6 and 2. Their average grade for reading was 1.8, a score similar to that of the total Follow-Through sample.

Group 10 (High Scoring Males): The 24 high scoring males attended Follow-Through programs in schools 5, 2, and 6. Their average grade in reading was 1.6, slightly higher than the average grade of the total Follow-Through sample. Although parental marital status was suggested by the AID program as an additional variable for accounting for variations, there were not enough subjects in this group to justify further statistical analysis.

Group 11 (Low Scoring Males): The 15 males who received the lowest grades in reading were from schools 1, 4, and 0. The average grade for reading received by this group was 2.2.

Summary

This analysis strongly indicates that the occupational position of the mother has a great impact upon a Follow-Through student's performance in reading as is evaluated by his teacher. Those students who had mothers working in skilled and semi-skilled occupations attained an average grade in reading of 1.35 (1 = progressing very well). Those children who had underemployed and unemployed mothers had an average grade of 1.8 (2 = progressing satisfactorily). For the latter group, further variations could be accounted for by examining the size of the family, the sex of the student, and the school that the student attended. Of those student whose mothers were unemployed or underemployed, those from large families did better than those from families in which there were three children or less. Of those from large families, girls fared better than did the boys. The girls from large families in which the mothers were unemployed or underemployed did better in schools 5, 0, 4, and 1; their grades, in fact, were as good as those received by students who had mothers working in skilled and semi-skilled occupations. The group of students with the lowest grades in reading consisted of 15 boys from large families who had unemployed and underemployed mothers and who attended schools 1, 4, and 0.

This indicates the great impact that the nature of the family can exert upon a pupil's performance as is assessed by teachers. These findings, however, also point up the influence that certain schools may have, an influence which can nearly surmount some of the less desirable attributes which may characterize some kinds of families.

G. Wide Range Achievement Reading Test Scores: Accounting for Variations Among Follow-Through Students

In an attempt to further discern differences which might account for the variations in the performance among Follow-Through students, their test scores received

on the Wide Range Achievement Reading Test have been analyzed with the AID program For the independent variables employed in this analysis, complete information was available for 72 Follow-Through pupils. The schools in which these pupils were enrolled and the average Wide Range Reading Test grade-level score for each school are as follows:

School 0	N = 11	$\bar{X}$ = 2.63
School 1	N = 13	$\bar{X}$ = 3.65
School 2	N = 16	$\bar{X}$ = 4.08
School 3	N = 0	(Basal Reading students only)
School 4	N = 5	$\bar{X}$ = 3.02
School 5	N = 3	$\bar{X}$ = 3.00
School 6	N = 24	$\bar{X}$ = 2.70

Although schools 4 and 5 are under-represented in this sample, the general trends to be found in this analysis may be taken as an indication of program effects upon the students.

The independent variables which were used to analyze this particular group of subjects were:

1. Sex
2. Adults pupil currently lives with
3. Current marital status of parents
4. Father's Occupation
5. Mother's Occupation
6. Number of siblings in the family
7. School attended during second grade-level
8. Absenteeism

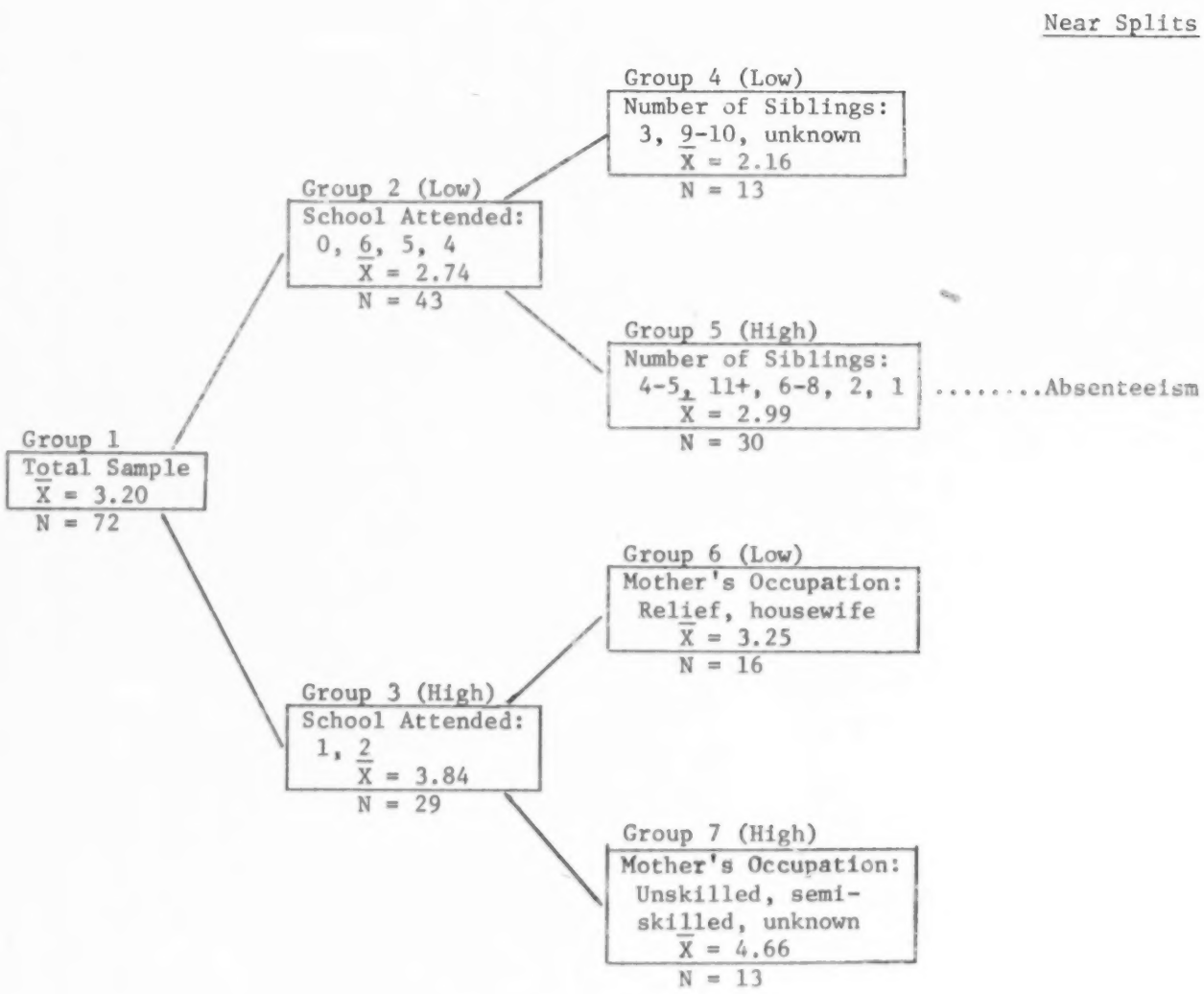
As may be seen in Table 4.7, there were three major independent variables which accounted for most of the variation in the scores attained by these Follow-Through students on the Wide Range Achievement Reading Test. These were (1) School attended during the second grade, (2) Number of siblings in the family, and (3) the occupation of the mother. The importance of these major variables is as follows:

School Attended

It was found that the 72 Follow-Through students in this analysis attained an average grade-level reading score of 3.20. Using the AID analysis to determine which

TABLE 4.7

Wide Range Achievement Reading Test Scores: Accounting for Variations Among Follow-Through Students



of the eight independent variables could most successfully account for the variation in these scores, it was found that the school attended during the second grade was the most powerful. After calculating the mean scores for each school, the pupils were divided into the following two groups:

> Group 2 (Low Scores): The 43 pupils in this group attended schools 0, 6, 5, and 4 (5 and 4 were under-represented in this sample). The average scores for each school ranged from 2.63 to 3.02. The average grade-level reading score for this group was 2.74. As will be subsequently discussed, it was found that further variations in the reading scores received by these pupils could be accounted for by assessing the number of children in their families.
>
> Group 3 (High Scores): The 29 pupils in this group attended schools 1 and 2. These two schools had an average grade-level reading score of 3.65 and 4.08. The average score for this group was 3.84. Further variations in the scores received by these students could be accounted for by determining the occupational prestige levels of their mothers.

This section of the analysis indicates once again that the type of school that a student attends has a predominant influence upon his performance. This particular variable is the most powerful one in accounting for the scores that students make on the Wide Range Achievement Reading Test. Further variations in the scores that these students attained may be accounted for by certain variables associated with their family background. These are as follows:

Number of Siblings

For the 43 students in the lower scoring Group 2, further variations in the grade-level reading scores attained could be accounted for by discerning the number of other children in their families. After calculating the mean scores for each fmaily size, the following two groups were formed:

> Group 4 (Low Scores): The 13 students in this group appear to come from either rather small or rather large families. Because of the disparate distribution of familial size for this group, no conclusions can be made other than the size of the family appears to have some impact upon their performance on achievement tests. An average reading score of 2.16 was attained by this group.
>
> Group 5 (High Scores): The 30 students in this group appear to come from very small or very large families. The mean scores by family size ranged from 2.73 to 3.60. The total grade-level mean reading score for this group was 2.99. The

AID program indicated that further variations in test scores might be accounted for with the variable of Absenteeism; however, the differences in mean scores associated with the extent of absenteeism were not great enough to warrant further satistical analysis.

Mother's Occupation

Further variations in the grade level reading scores attained by the 29 pupils in Group 3 (from high scoring schools) could be accounted for by determining the occupational prestige levels of their mothers. After calculating the mean grade level scores for each occupational position, the following two groups were formed:

Group 6 (Low Scores): The 16 students in this group had mothers who were either housewives or who were on relief. The mean scores by occupational category were 2.96 and 3.39. The average grade-level reading score of this group was 3.25, a score which is above the mean of the total sample of Follow-Through students.

Group 7 (High Scores): The 13 pupils who received the highest grade-level reading scores had mothers who worked in unskilled or semi-skilled occupations or whose occupations were unrecorded. The mean scores for these categories ranged from 4.30 to 5.20. The average grade-level score for this group was 4.66.

Summary

In an analysis designed to account for variations in grade-level scores attained in the Wide Range Achievement Reading Test by Follow-Through pupils, it was found that the greatest amount of the variation in high and low scores could be accounted for by determining which schools the students attended during the second grade (the grade-level in which they were assessed). The variations in scores for those students enrolled in the lower-scoring schools could be further explained by examining the sizes of the families in which they lived. Higher scoring students (i.e., from schools associated with higher scores) could be further analyzed on the basis of the occupational prestige levels of their mothers. Students who had working mothers and who were enrolled in schools associated with higher performance norms achieved reading scores which approximated the fifth grade level. Students from rather large or rather small families who were enrolled in schools associated with lower performance norms were reading at about the second grade level.

Once again, this analysis indicates that the type of school that a student attends has a great impact upon his achievement as measured by current testing procedures. The influence of the student's family background is also great, but certain schools appear to be able to surmount certain undesirable influences.

H. School Adjustment: Classroom Observation of Early Educational Programs[1]

Statement of Purpose

Classroom observations were conducted to gather relevant data about student adjustment and classroom behavior in three early education programs in operation in the Grand Rapids Public Schools. The three programs are popularly known as Follow-Through, Project Read and Basal Reading.

Classroom Observations

The classroom observation experiment was designed to discover and measure any positive or deleterious effects of the programs upon the social behavior of the students. More specifically, the analysis was oriented toward the social and psychological aspects of the programs: achievement and performance data were to be examined as a part of the larger report from which this project has been derived.

The objectives of this research were to label and measure the positive features of the respective programs and to discern any undesirable effects upon the students' behavior. Hence, attention was focused upon (1) student deportment, (2) work habits, (3) deviancy from classroom and teacher norms, and (4) the students' emotional and social adjustment as measured by teacher evaluations. To accomplish this, ten college students majoring in education were trained in the methods of classroom observation.

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[1]This report was designed, conducted, and prepared by Robert L. Horton.

Two hundred and three students from the three respective programs were observed for combined periods of one hour per student. Each student was observed by two observers alternatively and the student's behavior was charted according to type and duration. (See Observation Forms in Appendix A for specific categories.)

For comparative and analytical purposes, the coded behavior of each individual student was combined with others to produce group scores (group means) for each respective program. The logic behind this methodology assumed that any differences in group mean scores would represent the effects of the type of program upon the students' behavior and adjustment. If, for example, one program mean score for self-discipline (concentrating and working at an assigned task) was greater than that of the other programs, the effect is taken to represent that programs' tendency to produce better work habits. Similiar comparisons are made for the different adjustment variables and work habits measured.

As stated previously, student behavior was assessed by the general categories of deviance from classroom norms, work habits, and deportment. Deviation from classroom norms was measured by the frequency of occurence of (1) talking to others when the student had been assigned a task, (2) leaving the work area, (3) shifting of work task from an assigned to non-assigned task, (4) inattentive behavior, and (5) agressive acts toward self, others, and objects. Very similar and comparable criteria were successfully used by Quay and Glavin[1] to identify abnormal behavior and emotional disturbances among behaviorally handicapped children in the classroom setting. Quay and Glavin found that these criteria effectively identified maladjusted children through the technique of classroom observation. Thus, this analysis could be expected to detect any abnormal behavioral problems which might be associated with program differences. Quay and Glavin made an extensive check of observer reliability: the

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[1]Quay, Herbert C., and Glavin, John P., "The Education of Behaviorally Disordered Children in the Public School Setting", Project Number 482207, Department of Health, Education, and Welfare, U. S. Office of Education, 1970.

observers consistently scored over 90% reliability while using measures very similar to those used in this study. Due to the unusually high reliability associated with these measures, the extra expense of measuring observer reliability was abondoned in favor of increasing the total number of observations (which also increases reliability).

Work habits were measured by recording the proportion of time the student spent in actual task-oriented behavior as well as the proportion of time he engaged in deviancy (play, talking, or daydreaming when he had an assigned task). The purpose of this classification was to compare the tendency of each program to create self-sustaining or task oriented behavior. The single reading group session in the Basal Reading and the Project Read programs was different in structure than Follow-Through in that Follow-Through had a series of small group sessions, one for each academic subject. Since the Follow-Through program was more small-group oriented in its instruction, one may hypothesize that it created less self-reliance for individual work. Thus the programs were compared according to the proportion of time the students concentrated and worked at an assigned task for a thirty minute period following the assignment. The form and proportion of alternative behavior was also recorded, allowing a comparison of programs on five separate variables. (See Observation Forms in Appendix A.)

Teacher Evaluations

Recognizing that the single period of observation by classroom observers may be atypical in some cases, teacher evaluations of deportment, personality type, and social adjustment were also collected for each child observed. This allowed a comparison of teachers' perceptions of the students in each program as served as a cross-check for the data collected from students.

The following dimensions were employed for collecting data on teacher evaluations of individual students: (1) obedience to teacher norms, (2) play adjustment, (3) play

habits, (4) happiness and self-adjustment, (5) personality type, and (6) students adjustment toward others.

A classroom climate measure was also employed for each classroom in which observations were made; however, the small number of classrooms observed in the Project Read and Basal Reading programs (three classrooms each) severely limit the application of their data.

Characteristics of the Sample

The population for this study consisted of all second year students in early education programs in the inner city of the Grand Rapids Public Schools. Six schools with second year Follow-Through programs and one each with a Project Read and a Basal Reading program were selected for investigation.

Seventy-five percent of the second year students from each school were selected for observation. In the Follow-Through program, 93 students in six schools were observed, 40 in Project Read, and 70 in Basal Reading. The sex ratio of each program conveniently turned out to be almost even. Over 95% of the Project Read and Follow-Through pupils were black and 80% of the Basal Reading students were white.

Discussion of the Findings

The data were collected and punched on IBM cards for analysis. The appropriate variables were subjected to a computer analysis of chi-square, correlation analysis, and analysis of variance. Additional statistical tests were conducted as needed.

Findings

Deviancy From Classroom Norms

Deviance from classroom norms is used both as a measure of adjustment and a measure of self-discipline. The maladjusted child would be expected to be more deviant in his classroom behavior, and the frequency occurence would be expected to represent such behavior (Quay and Glavin). The collection of individual scores,

TABLE 4.8

Mean Scores for Deviance from Classroom Norms, by Program

	Follow-Through	Project Read	Basal Reading
Inappropriate Verbal Behavior	2.2	2.2	1.5
Leaves Work Area	2.6	1.8	1.5
Shifts Work Task	0.97	0.41	0.72
Inattentive Behavior	1.6	2.3	1.7
	N = 93	N = 40	N = 70

Pages' L

	Follow-Through	Project Read	Basal Reading
Inappropriate Verbal Behavior	2	1	3
Leaves Work Area	3	2	1
Shifts Work Task	3	2	1
Inattentive Behavior	3	2	1
$\sum^{m} X_{ij} =$	11	7	6
$Y_j \sum^{m} X_{ij} =$	33	14	6 = 53

P > .10

when summed, would indicate any definite tendency for a program to produce or contain any disproportionate amount of deviance or deviants.

To measure deviance, the following behavioral categories were used: (1) inappropriate verbal behavior; (2) leaving the work area; (3) shifting work task; and (4) inattentive behavior. The category for withdrawal behavior (a most extreme indication of maladjustment) was dropped from the analysis because the frequency of occurence was too rare to be computed meaningfully. The results of this measurement are represented on Table 4.8. Examination of the data shows a tendency for the Basal Reading program to have generally lower mean scores for each deviance category, suggesting that Basal Reading students are less deviant than students in other programs. In using Pages' L-test, the programs are ranked and the consistency of ranking is tested for significance.[1] Pages' L was computed and found to be significant at the .10 level. Thus one may conclude that slightly more deviant behavior is exhibited in the Follow-Through program and the least in Basal Reading.

However, it should be noted that the range of mean scores is quite small and closely grouped, suggesting that although the difference is statistically significant, caution should be used in making any definitive statements about program effects. While differences were noted among the three programs, no program showed any large effect. When these findings are applied to the range of behavior in the classroom setting, one may only conclude that no definite or extreme forms of classroom deviancy is created by or associated with type of program.

Work Habits Summary

Student study habits were examined in order to measure self-reliance and work habits. Some authorities have conjectured that the differing structures and approaches of the programs may create different degrees of self-reliance for independent study.

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[1] Page, Ellis Batten, "Ordered Hypotheses for Multiple Treatments: A Significance Test for Linear Ranks", American Statistical Association Journal, March, 1963, P-216.

Study habits were assessed by measuring the proportion of time the student was directly engaged in various activities for each 30 minute period of observation. The students were observed only when they had been assigned an independent work task. The categories consisted of (1) concentrating or working at the assigned task; (2) playing during the work period; (3) talking with others of a non-academic nature; (4) inattentive behavior during the work period; and (5) inappropriate mobility not related to the work task. An examination of Table 4.9 shows that students in all programs spent about 75% of their time engaged at their assigned work task. This proportion is similar to Quay and Glavin's findings for normally adjusted children. The mean scores for the different categories suggest that students in the Basal Reading program are slightly more diligent in their work activity and less prone to diversion.

The scores were ranked and measured by Pages' L. The difference was again significant ($P > .01$). However, the range of these mean scores was even less than for classroom deviance, showing that the scores were very closely grouped. Although a statistically significant difference exists for student work habits, the difference is indeed small when applied to the classroom context. Student work habits are quite similar among the different programs, with a slight advantage for the Basal Reading program.

As an added prevention, mean scores were cross-tabulated by schools in order to check the variation and validity of the grand mean scores. An examination of Table 4.10 shows that there was considerable difference in mean scores by schools, indicating that variation was measured and represented by the grand mean scores. Table 4.10 suggests that the differences in study habits and adjustment is more a product of the contexts of the different schools than of the programs. Thus, variation in student behavior is more appropriately attributed to the different influences of the school-teacher context than to the type of program the student is involved in.

TABLE 4.9

Mean Scores for Student Work Habits, by Program
(Minutes of activity per 30 minute work period)

	Follow-Through	Project Read	Basal Reading
Concentrates, Works at Assigned Task	21.3	22.2	23.5
Plays During Work Period	2.5	1.8	1.1
Talks During Work Period	4.0	3.8	3.5
Inattentive Behavior	1.9	1.4	2.0
	N = 93	N = 40	N = 70

Pages' L

	Follow-Through	Project Read	Basal Reading
Fails to Concentrate	3	2	1
Plays During Work Period	3	2	1
Talks During Work Period	3	2	1
Inattentive Behavior	2	3	1
$\sum^{m} X_{ij} =$	11	9	4
$Y_j \sum^{m} X_{ij} =$	33	18	4 = 55

P > .01

TABLE 4.10

Variation in Mean Scores for Students' Behavior, by Schools

	1	2	3	4	5	6	7	8
Inappropriate Verbal Behavior	2.2	6.8	3.1	1.9	0.4	2.0	2.2	1.4
Inattentive Behavior	1.5	7.7	1.2	1.2	0.5	0.5	2.3	1.6
Concentrates, Works at Assigned Task	21.5	17.0	15.7	27.0	21.8	24.0	22.2	23.5
Plays During Work Period	3.4	2.7	4.5	0.3	1.3	0.5	1.8	1.1
Inappropriate Verbal Behavior	3.1	6.2	5.1	2.7	4.2	4.2	3.8	3.5
	N = 21	N = 8	N = 21	N = 18	N = 12	N = 13	N = 40	N = 70

Teacher Evaluations

Teacher evaluations for each observed student were obtained to provide a more comprehensive view of student behavior and adjustment and to serve as a cross-check for the observer data. Teachers indicated the score for each student on a scale ranging from 1-5 on six behavioral and adjustment dimensions.

Student's obedience to teacher norms: An examination of Table 4.11 indicates that teachers generally felt their students are well behaved. This, perhaps, may be more a reflection of the teachers' success in maintaining control over their charges than in representing behavioral conformity of the students. The obedience patterns, however, were quite similar by program. This is an indication that there are no definite deviance forms which may be attributed to program type. One may cautiously infer that Project Read teachers felt their students were the most obedient; however, the inordinately small number of teachers (3) prevents any substantial claim.

Teachers evaluation of student's adjustment: Student adjustment was approached from three dimensions: student's play adjustment; personal happiness and self-adjustment; and adjustment toward others. (See Tables 4.12, 4.13, and 4.14.) Again it is apparent that teachers generally perceived their students to be reasonably well adjusted.

These tables should also be interpreted with caution. Although there is no indication of any effects that can be directly ascribed to any particular program, one must keep in mind the different socio-economic composition of the different programs. Both Project Read and Follow-Through programs were operated in a more extreme physically and culturally deprived neighborhood context than was characteristic of the Basal Reading program. Broken homes, unemployment, and inadequate housing characterize the former neighborhoods. In light of this consideration, the lack of any strong difference between programs is significant.

TABLE 4.11

Teacher Evaluations of Student Obedience to Teacher Norms, by Program
(Percentage distribution by category)

		Follow-Through	Project Read	Basal Reading
		%	%	%
Seldom Obeys, Disruptive	1	2	0	0
	2	7	3	7
	3	26	11	24
	4	26	51	52
Readily Obeys	5	39	35	17
		100% N = 93	100% N = 40	100% N = 70
		X^2 = 31.5 P > .01	df = 8	

TABLE 4.12

Teacher Evaluations of Student Play Adjustment, by Program
(Percentage distribution by category)

		Follow-Through	Project Read	Basal Reading
		%	%	%
Plays Poorly With Others	1	1	3	3
	2	7	8	12
	3	31	40	31
	4	33	27	43
Plays Well With Others	5	28	22	11
		100% N = 93	100% N = 40	100% N = 70
		X^2 = 15.40 P > .05	df = 8	

TABLE 4.13

Teacher Evaluations of Student Happiness and Self-Adjustment, by Program
(Percentage distribution by category)

		Follow-Through	Project Read	Basal Reading
		%	%	%
Poorly Adjusted	1	0	0	0
	2	8	3	4
	3	17	27	36
	4	45	46	47
Well Balanced	5	30	24	12
		100%	100%	100%
		N = 93	N = 40	N = 70
		X^2 = 11.3	df = 8	
		P > .02		

TABLE 4.14

Teacher Evaluations of Student Adjustments Toward Others, by Program
(Percentage distribution by category)

		Follow-Through	Project Read	Basal Reading
		%	%	%
Disruptive, Creates Problems	1	6	0	4
	2	11	22	4
	3	42	43	67
	4	30	27	21
Constructive, Assists Others	5	11	8	3
		100%	100%	100%
		N = 93	N = 40	N = 70
		X^2 = 32.95	df = 8	
		P > .001		

Teachers evaluation of student's personality type: The teacher's evaluation of student personality type was in accordance with the previous data. (See Table 4.15.) No particular program can be associated with any extreme form of personality type. However, in light of the previously stated difference in neighborhood context of the programs, this lack of difference may be significant indeed.

TABLE 4.15

Teacher Evaluations of Student Personality Types, by Program
(Percentage distribution by category)

		Follow-Through	Project Read	Basal Reading
		%	%	%
Extrovertive, Hyperactive	1	6	3	4
	2	21	22	18
	3	55	40	67
	4	17	27	11
Introvertive, Withdrawn	5	1	8	0
		100%	100%	100%

$X^2 = 28.07$ df = 8
$P > .01$

In this table, as with others, we see a statistical regression toward the mean. In other words, individual scores tend to cluster around the mean, thus failing to depict extreme variation. This point should be considered when interpreting these evaluations.

Classroom Climate

Along with the observation of students, the classroom climates of the respective schools were also measured. The small number of classrooms observed prevents a rigorous statistical analysis; however, enough data were obtained to make some very general statements.

General organization of activities: Classrooms were, in general, well organized; the Basal Reading and Project Read classrooms were slightly better organized. All programs were observed to provide opportunity for independent self-motivated learning. All classrooms were judged to provide an atmosphere condusive to learning.

Student activity: In all three programs, observers recorded disruptive behavior. Teachers were quite similar in their method of discipline, i.e., stern verbal disapproval.

Conclusion

The general conclusion emerging from this study is that Basal Reading students were slightly better adjusted and more diligent in their work habits, followed by Project Read and, then, Follow-Through students. While there were slight differences among the programs which were statistically significant when not controlling for differences among teachers and schools, the strong similarities in the program results do not permit these findings to assume strong substantive meaning. There is more behavioral variation among schools and teachers then among programs. The variation among programs is quite similar.

However, the lack of strong program difference is perhaps the most interesting observation. As stated earlier, the samples observed were quite different in composition: the Basal Reading school is 80% white, characterized by much greater family unity and stability, and located on the fringe of the inner city. The sample for Project Read and Follow-Through was 95% black, characterized by very low family stability, and is centered in the "inner city". One would expect, given the current literature, that many more adjustment problems and poorer study habits would be found among the inner city population. The lack of any major differences among the programs becomes the most significant difference of the study.

The value of compensatory programs such as Follow-Through and Project Read for the culturally disadvantaged appears to be supported.

Summary of Findings on Students

Eleven different independent variables, most of which have been demonstrated by other educational researchers to be associated with academic achievement and school performance, were used in an Automatic Interaction Detection analysis to discern prospective differences among (1) Follow-Through, Project Read and Basal Reading students, (2) Follow-Through students, Project Read pupils and Follow-Through Leavers, and finally (3) Follow-Through students themselves. These eleven independent variables were:

1. Current educational program (Follow-Through, Project Read, Basal Reading)
2. Sex (male or female)
3. Race (black, white, chicano, other)
4. Persons pupil lives with (parents, step-parents, mother, guardian, etc.)
5. Current marital status of parent
6. Father's Occupational Prestige Level
7. Mother's Occuptaional Prestige Level
8. Number of other children in the family
9. First grade program child was enrolled in (Continuous Progress, Follow-Through, Basal, etc.)
10. Current school that pupil attends (second grade)
11. Absenteeism from school

The criterion variables for these analyses were the Metropolitan Achievement Reading Test, the Wide Range Achievement Reading Test, the Stanford-Binet Intelligence Test, and Teachers' Evaluations of Pupil Reading Performance (Grades).

For each analytical problem, the basic research question was: which of the independent variables is of the greatest utility in accounting for variations on the criterion measure (i.e., high and low scores)? In each separate analysis, there were several variables which were of recurrent importance in explaining variations, no matter the criterion measure. These major independent variables are listed in the order of their importance for each criterion measure in Table 4.16.

As may be seen in Table 4.16, at least two independent variables appear to be of prime importance for accounting the variations in the scores received on any of

TABLE 4.16

Order of Importance of Major Variables Accounting for Variations on Criterion Measurements

Criterion Variable and Sample Tested	Order of Importance 1	2	3	4
Metropolitan Achievement Reading Test Total Sample (Follow-Through, Project Read, Basal Reading Students)	First Grade Program	School Attended & Number of Siblings	Mother's Occupation	--
Teachers' Evaluations of Reading Performance Total Sample (Follow-Through, Project Read, Basal Reading Students)	Mother's Occupation	First Grade Program	Father's Occupation	--
Wide Range Achievement Reading Test Sub-Sample (Follow-Through, Project Read, Follow-Through Leavers)	School Attended	Mother's Occupation	School Attended	--
Stanford-Binet Intelligence Test Sub-Sample (Follow-Through, Project Read, Follow-Through Leavers)	Father's Occupation	School Attended	First Grade Program & Father's Occupation	--
Teachers' Evaluations of Reading Performance Total Follow-Through Sample	Mother's Occupation	Number of Siblings	Sex	School Attended
Stanford-Binet Intelligence Test Sub-Sample of Follow-Through	School Attended	Parental Marital Status & Number of Siblings	Mother's Occupation	--
Wide Range Achievement Reading Sub-Sample of Follow-Through	School Attended	Number of Siblings & Mother's Occupation	--	--

the criterion measures: the school that the student attended during the second grade and the occupational prestige level of the student's mother. The variable of School Attended was indicated by the AID analysis as being an important explanatory variable in eight different instances; the variable of Mother's Occupation was suggested on six different occasions. As indicated in the analyses, these two variables appear to work together. Due to their mother's occupational positions, some children perform very well in schools which are associated with lower achievement. On the other hand, some schools associated with higher achievement have a positive impact even on the children of unemployed or underemployed mothers.

Another variable which appears rather consistently is that of the number of other children in the family. At this point, the only conclusions about this can only be a matter of speculation; for some reason, however, it appears that children from very small or very large families do better than those from intermediate-sized families.

The variable of Father's Occupational Prestige Level, one which is frequently employed by many investigators, does not appear to be of crucial importance with this sample. One reason for this might simply be the fact that the fathers of many of the subjects under investigation do not live in the home and, as such, no information could be gathered on the occupational positions of a large proportion of the fathers. Since this is the case, this particular factor would work as a "constant" for many subjects and, as such, could not account for variations in the criterion measurements.

Another variable which was employed on three occasions was that of the type of program the students had in the first grade. Certain programs appeared to be associated with lower achievement than did others; on the other hand, students who were in higher achieving schools during the second grade still did very well even though they had been in less influential first grade programs.

Other variables which were infrequently employed were those of the sexual status of the student and the current marital status of the parent. These, however, do not appear to be important considerations.

What is of importance, however, is the fact that in no case were the investigators ever able to account for variations in student performance on the basis of the current elementary educational programs. At no point in the analysis did one group of pupils stand out from another on the basis of being enrolled in Follow-Through, Project Read, or the Basal Reading Program. What this means is that these black, inner city, poverty-level pupils are performing on a level which is quite equivalent to that of the more advantaged, white students in the Basal Reading program. No substantial differences could be found between the black and the white pupils. In this respect, then, the experimental elementary programs have been a profound success.

On the other hand, there were a number of variations which were discerned among the black student sample. A great many of these differences could be attributed to the school that they attended during the past year. It is strongly recommended that further and much more intensive investigation be given to these schools in an attempt to assess those factors which are associated with higher performance norms.

PART II - THE TEACHERS

A number of dimensions were assessed in examining the teacher sample: job and classroom program satisfaction; career satisfaction; teachers' perceptions and expectations of their students; teachers' perceptions and characterizations of the parents; teachers' attitudes towards accountability; perceptions of the strengths and weaknesses of each respective elementary educational program; and a number of other relevant factors. Each of these areas are treated as sub-topics in this section.

Description of the Sample

Questionnaires were sent to the principals of the various schools to be distributed to the teachers. Approximately 85 names of teachers were selected from the Directory of the Grand Rapids Public Schools; the principals were asked to make sure that each designated teacher received a questionnaire. After a two-week period, the principals were asked to once again remind the teachers to return their questionnaires. Twenty-one Follow-Through teachers, fifteen Project Read teachers and twenty-eight Basal Reading teachers completed their questionnaires and returned them in the school mail.

The amount of teaching experience varies considerably for the three different groups of teachers. The Follow-Through teachers tended to have the least number of years of teaching experience (the majority had taught less than two years), and the Basal Reading teachers had the most (ten had taught for more than ten years). Thirteen Follow-Through and thirteen Project Read teachers had had experience in teaching different types of elementary education programs; nineteen of the Basal Reading teachers had had no such comparable experience. Of those who had had teaching experience with other programs, the majority had been in some type of Basal Reading program. Therefore, many of the teachers in this sample were able to make quite knowledgeable comparative assessments when asked to do so.

The socio-economic status backgrounds of all of the teachers were quite similar. As indicated by reports of their fathers' occupational prestige levels, the large majority came from upper-lower and lower-middle social class origins. As assessed by the occupational prestige level of their spouses, there was considerable evidence of a high degree of upper mobility among all teachers - many had married persons who are employed in professional categories. In terms of social class origin and of current socio-economic status levels, then, there were little differences between the teachers which might be related to whether they taught in the Follow-Through program, Project Read, or the Basal Reading program. As previously indicated, the only distinguishable background characteristic between the three groups of teachers concerned prior experience in another type of program. Nearly all of the Project Read teachers, with the exception of two, had taught in a Basal Reading or other type of program; slightly more than half of the Follow-Through teachers had had a related experience while the large majority of the Basal Reading teachers had not.

Findings

One of the first questions that was asked of the teachers from the three different programs concerned their impressions of the greatest strengths of their own respective programs. They were next asked to enumerate the greatest single weaknesses and then to list suggestions for improving the programs that they were involved in. The teachers' perceptions of the greatest single strength of their own programs are listed in Table 4.17 in the order of the frequency in which they were mentioned.

Table 4.17, which lists teachers' perceptions of the strengths of the three different programs, lists their perceptions in order of the frequency that these characteristics were mentioned. Fourteen of the 21 Follow-Through teachers stated that they believed that their program enhanced their students' self-confidence in one of a number of ways; it was felt that this is generally attributable to the

TABLE 4.17

Teachers' Perceptions of the Greatest Strengths of Follow-Through, Project Read and the Basal Reading Program

Follow-Through	N	Project Read	N	Basal Reading	N
Builds students' self-confidence with reinforcing activities and achievement of direct success	(14)	Highly individualized	(8)	Improves vocabulary, especially phonics	(9)
Individualized instruction	(5)	Improves vowel sounds	(5)	New texts are relevant and refreshing	(7)
Supplementary help from teacher aides	(5)	Flexibility in grouping of students, can work at own rate	(5)	Individualized and logically sequenced program	(4)
Good phonetic method	(3)	Structure helps novice reading teacher		Improves self-concept	(2)
Distar materials	(3)			Motivates slower pupils	
High expectations and accountability	(2)			Develops good citizenship & classroom behavior	
Active parental involvement				Reading skills	
Highly structured					

positive immediate reinforcement that the children receive along with the fact that these pupils are guaranteed to be successful in their learning efforts. Nearly one-fourth of the Follow-Through teachers felt that individualized instruction and the supplementary help from the teacher aides were strong points of the program. These three aspects of the program were the most consensual items; other various features included comments about the phonetic method, the Distar materials, the involvement of parents, and the highly structured nature of the program.

The second question that the teachers were asked was to list their perceptions of the various weaknesses of the programs that they taught. These are listed in Table 4.18.

TABLE 4.18

Teachers' Perceptions of the Greatest Weaknesses of Follow-Through, Project Read and the Basal Reading Program

Follow-Through	N	Project Read	N	Basal Reading	N
Lack of initiative and often (consequently) of personal motivation on part of the teachers	(10)	Teaches comprehension and listening skills poorly	(9)	For teachers using the Ginn program, the material prior to the 360 series was poor	(8)
Too much pressure on teachers and pupils	(4)	Limited in variety of concepts taught and in testing procedures	(6)	Groups unweildy, need teacher aide	(7)
More time needed	(4)	Rote learning, little challenge or motivation for pupils	(6)	Too flexible, needs structure	
Small group effective, but kids can't work in large groups	(3)	Lacks reinforement work (seatwork)	(2)	Testing is too irregular	
Child can't choose own group	(2)	Requires aides for group work			
No spelling, writing, music	(2)	Spelling book not correlated with program			
Uncooperative aides at times					

As is illustrated in the preceding table, there is a rather high consensus among the Follow-Through teachers that the single greatest weakness of their program revolves around problems of structure. Many of them seem to feel as if they are unable to use their own initiative in teaching; this then may lead to the feeling that they become less personally motivated. Other problems that were mentioned included perceptions that too much pressure was placed either on the teachers or the students, and that more time was needed for them to cover the subject materials; but these problems were only mentioned four times each.

The Project Read teachers seemed to perceive weaknesses of a quite different nature; most of the weaknesses they mentioned were related to the task of helping

children learn to read. Nine teachers felt that their program is weak in the teaching of comprehension and listening skills. Six teachers commented that the variety of concepts to be taught were limited or that the testing procedures should be somewhat more systematic. An equal number felt that their program encourages rote learning or memorization or that it fails to challenge or motivate the children.

The most frequently mentioned weakness of the Basal Reading Program was that the material was poor - but nearly all of the teachers who made this comment qualified it by stating that the "old" material was poor, and the newer materials were much better. Seven of these teachers felt that the groups that they had to teach were unwieldy or needed the help of a teacher aide.

Thus, the three groups of teachers seem to feel that each type of program has its own unique weaknesses. Most of the comments made by the Follow-Through teachers seemed to be related to the difficulties of teaching; the observations of the Project Read teachers were more centered on the problems of learning. The greatest single problem of the Basal Reading Program, i.e., the poor material, has apparently been resolved.

The third open-ended question that the teachers were asked was to make suggestions which might improve their programs. The results of this question are presented in Table 4.19.

The teachers' suggestions for improving their programs, as illustrated in the following table, are not clearly related to their perceptions of the weaknesses of their respective programs (see Table 4.18). As was true for perceived weaknesses, however, the three groups of teachers seem to be concerned with different types of problems. Although there is no great degree of unanimity over any of the issues (with the exception that the Basal Reading teachers did not like the "old" materials that have since been replaced), the Follow-Through teachers seemed to be more likely to suggest things that would make teaching easier while the Project Read teachers'

TABLE 4.19

Teachers' Suggestions for Improvements to be Made in Follow-Through, Project Read and the Basal Reading Program

Follow-Through	N	Project Read	N	Basal Reading	N
Lower teacher-student ratio	(6)	Materials and activities to improve listening and comprehension	(3)	Smaller groups and more teacher aides	(6)
More room for teacher involvement	(4)	Gear program to child's background	(2)	Old materials should be changed, be more relevant	(13)
Less interruption from consultants	(3)	Encourage children by giving rewards (certificates, etc.)	(2)	Less clerical work	(2)
Tutoring for slower pupils	(2)	More room space		In-service training for teachers	
Stability of student enrollment	(2)	More parental involvement		Check on student readiness	
Less board hour requirements	(2)	Homogeneous grouping		Consistency in community school programs	
Have spelling, writing, music	(2)	Have spelling books correlated with program			
Vary presentations					
Clearer directives					

suggestions centered more on ideas that might make learning easier. The Basal Reading teachers seem to be more concerned with changing the nature of large, unwieldy groups by either altering their composition or by adding teacher aides.

In summary, based upon the teachers' comments, it can be tentatively concluded that:

1. Follow-Through teachers feel that their program is very strong in its impact on students, but it presents certain problems to the teacher in terms of inhibiting teachers initiative and motivation.

2. Project Read teachers feel that their program may be rather weak in its impact upon students; but it seems to present considerably less difficulties for the teacher.

3. Basal Reading teachers seemed to be over-whelmingly critical of the older reading materials that some of them used; this problem seems to have been happily resolved with the provision of up-dated readers. Perhaps, because of the diversity in the operation of this program throughout the different schools, there seemed to be little consensus about the various strengths and weaknesses of this program for either teachers or students.

Teacher Satisfaction

One of the concerns of program planners, supervisors, administrators and especially inner city principals revolves around the extent of satisfaction that teachers receive from their classroom program, their jobs, and their work setting. In order to assess whether there might be differences between the three groups of teachers along these dimensions, a series of questions were asked to provide an index of teacher satisfaction (see Appendix B, Items #4-28).

The first questions asked (see Appendix B, Items #4-20) were concerned with job satisfaction, particularly those areas of job satisfaction which might be associated with the type of program in which the teacher is employed. The response frequences, the mean responses of the teachers from each program and the θ (theta) values are presented in Table 4.20.

As may be seen from a visual inspection of Table 4.20, particularly the θ values, only a few items discriminated among the three groups of teachers in terms of job or program satisfaction. These and other findings are discussed in the following pages.

1. The majority of all teachers appear to be moderately satisfied with the methods which are used to make decisions on curriculum matters in their respective programs. As indicated by the mean scores, the Project Read teachers appear to be slightly more satisfied. The difference between programs, however, was minimal; when comparisons were made between the responses of the three groups of teachers, there were consistent differences in only 9% of the comparisons.

2. The majority of the teachers stated that they were at least moderately satisfied with the cooperation and help that they receive from their superiors. The Follow-Through teachers had a higher mean response rate

TABLE 4.20

Teachers' Satisfaction With Job and Classroom Program

ITEM	Values 1 Very Dissatisfied	2 Moderately Dissatisfied	3 Slightly Dissatisfied	4 Indifferent or Neutral	5 Slightly Satisfied	6 Moderately Satisfied	7 Very Satisfied	$\bar{X}$	θ
Method for making decisions on curriculum matters									
Follow-Through teachers	2	3	3	2	2	4	5	4.4	
Project Read teachers	1	1	2	1	1	5	3	5.2	
Basal Reading teachers	3	2	3	4	2	8	3	4.9	.09
TOTAL	6	6	8	7	5	17	11		
Cooperation and help from supervisors									
Follow-Through teachers	1	2	0	0	2	7	9	5.7	
Project Read teachers	1	2	0	1	4	2	5	5.0	
Basal Reading teachers	0	2	1	3	4	14	4	5.4	.18
TOTAL	2	6	1	4	10	23	18		
Educational philosophy which underlies classroom program									
Follow-Through teachers	3	1	0	1	2	3	11	5.4	
Project Read teachers	0	1	0	0	4	6	4	5.7	
Basal Reading teachers	0	3	3	1	7	9	4	5.1	.23
TOTAL	3	5	3	2	13	18	19		
Evaluation process superiors use to judge my effectiveness									
Follow-Through teachers	2	1	1	1	0	8	0	5.4	
Project Read teachers	1	1	2	0	1	5	5	5.2	
Basal Reading teachers	0	1	5	3	4	8	7	5.2	.16
TOTAL	3	3	8	4	5	21	12		
Motivation for achievement of students in my program									
Follow-Through teachers	3	0	2	0	3	0	13	5.5	
Project Read teachers	0	1	4	0	1	6	3	5.1	
Basal Reading teachers	0	1	4	0	1	16	5	5.7	.19
TOTAL	3	2	10	0	5	22	21		
Cooperation and help I receive from parents									
Follow-Through teachers	3	0	6	0	3	7	3	4.4	
Project Read teachers	0	2	1	0	3	7	2	5.2	
Basal Reading teachers	2	1	5	0	8	10	2	4.7	.11
TOTAL	5	3	12	0	14	24	7		

TABLE 4.20 (Con't.)

ITEM	Values 1 Very Dissatisfied	2 Moderately Dissatisfied	3 Slightly Dissatisfied	4 Indifferent or Neutral	5 Slightly Satisfied	6 Moderately Satisfied	7 Very Satisfied	$\bar{X}$	θ
Extent to which my program accomplishes stated goals									
Follow-Through teachers	0	0	1	1	3	4	12	6.2	
Project Read teachers	0	0	2	1	1	8	3	5.6	
Basal Reading teachers	1	1	2	0	6	12	6	5.4	.24
TOTAL	1	1	5	2	10	24	21		
Extent to which program gives me freedom for innovation and experimentation									
Follow-Through teachers	6	2	3	0	3	4	2	3.8	
Project Read teachers	1	1	0	0	2	4	7	5.7	
Basal Reading teachers	1	2	2	2	5	9	7	5.2	.39
TOTAL	8	5	5	2	10	17	16		
Extent to which I find program stimulates me intellectually									
Follow-Through teachers	5	2	3	3	1	3	4	3.8	
Project Read teachers	1	0	1	0	4	5	4	5.4	
Basal Reading teachers	1	2	4	9	3	7	1	5.2	.39
TOTAL	7	4	8	12	8	15	9		
Extent to which I find program to be physically exhausting									
Follow-Through teachers	5	4	1	7	1	1	2	3.3	
Project Read teachers	0	3	3	2	1	1	4	4.7	
Basal Reading teachers	1	2	4	9	3	7	1	4.5	.23
TOTAL	6	9	8	18	5	9	7		
How I feel about the progress of my students with my program									
Follow-Through teachers	1	0	0	0	1	9	10	6.2	
Project Read teachers	1	3	1	0	2	4	4	4.8	
Basal Reading teachers	1	1	2	0	5	13	6	4.9	.28
TOTAL	3	4	3	0	8	26	20		
How I feel about my personal intellectual growth with my program									
Follow-Through teachers	3	3	0	1	4	5	5	4.6	
Project Read teachers	1	1	1	2	1	5	4	5.1	
Basal Reading teachers	0	0	3	4	2	11	7	5.5	.14
TOTAL	4	4	4	7	7	21	16		

TABLE 4.20 (Con't.)

Values	1	2	3	4	5	6	7		
ITEM	Very Dissatisfied	Moderately Dissatisfied	Slightly Dissatisfied	Indifferent or Neutral	Slightly Satisfied	Moderately Satisfied	Very Satisfied	$\bar{X}$	θ
How I feel about my professional growth with my program									
Follow-Through teachers	1	2	1	0	4	8	5	5.2	
Project Read teachers	0	1	1	2	3	3	5	5.4	
Basal Reading teachers	1	0	4	5	3	8	7	5.1	.05
TOTAL	2	3	6	7	10	19	17		
How I feel about my program in general									
Follow-Through teachers	2	1	2	0	0	7	9	5.4	
Project Read teachers	0	3	0	1	3	4	5	4.9	
Basal Reading teachers	1	4	3	0	4	12	4	5.2	.19
TOTAL	3	8	5	1	7	23	18		
How I feel about the contacts I've been able to make with parents									
Follow-Through teachers	0	2	3	2	3	9	3	5.0	
Project Read teachers	2	1	3	0	2	3	4	4.6	
Basal Reading teachers	1	3	4	0	6	7	7	5.0	.04
TOTAL	3	6	10	2	10	19	14		
The adequacy of the in-service training for my classroom program									
Follow-Through teachers	1	2	1	2	1	7	7	5.3	
Project Read teachers	3	2	1	1	1	3	4	4.3	
Basal Reading teachers	8	2	7	2	3	4	1	3.4	.39
TOTAL	12	6	9	5	5	14	12		
How I feel about the testing procedures required for my classroom program									
Follow-Through teachers	2	1	1	1	3	5	8	5.3	
Project Read teachers	4	3	0	0	3	3	2	3.8	
Basal Reading teachers	9	3	4	1	4	4	3	3.4	.33
TOTAL	15	7	5	2	10	12	13		

(5.7) and the Project Read teachers had the lowest (5.0). The difference between the three programs was not great; when the answers of the three groups of teachers were compared, there were consistent differences in only 18% of the comparisons.

3. The majority of teachers were generally satisfied with the educational philosophy supporting their respective classroom programs. Project Read teachers were slightly more satisfied, as indicated by the mean response rate, but the difference between programs was not great. When the responses of the three groups of teachers were compared, there were consistent differences in 23% of the comparisons.

4. The teachers in all programs were reasonably satisfied with the evaluation processes that their superiors employed to judge their effectiveness. While the Follow-Through teachers had a slightly higher mean response, the difference between programs in minimal. When the responses given by the three groups of teachers were compared, there were consistent differences in only 16% of the comparisons.

5. Most teachers were generally satisfied with the motivation for achievement of the students in their program. The Basal Reading teachers had the highest mean response (5.7) and the Project Read teachers the lowest (5.1). The difference between programs, however, is slight; when the responses between the three groups of teachers were compared, there were consistent differences in 19% of the comparisons.

6. Most teachers are at least "slightly" or "moderately" satisfied with the cooperation and help that they receive from the parents of their pupils. Project Read teachers had the highest mean response rate (5.2) while the Follow-Through teachers had the lowest (4.4). There is little difference between the three programs, however, for when the responses were compared, there were consistent differences in only 11% of the comparisons.

7. The majority of the teachers were generally satisfied with the extent to which their classroom program accomplished its stated objectives. The Follow-Through teachers had the highest mean response rate (6.2) and the Basal Reading teachers had the lowest (5.4). In comparing the responses made by the three groups of teachers, there were consistent differences in 24% of the comparisons.

8. When asked to indicate their satisfaction with the extent to which their program gives them freedom for innovation and experimentation, the Follow-Through teachers were the least satisfied (with a mean response of 3.8) and the mean response of the Project Read teachers was the highest (5.4). A number of Follow-Through teachers stated that they were quite dissatisfied while the teachers in the other programs appeared to be relatively satisfied. When the responses between the three groups of teachers were compared, there were consistent differences in 39% of the comparisons.

9. When the teachers were asked to assess the extent to which they find that they are intellectually stimulated by their classroom programs, the Follow-Through teachers were again the least satisfied (a mean response of 3.8)

and the Project Read teachers were the most satisfied ($\bar{X}$ = 5.4). When the responses of the three groups of teachers were compared, there were consistent differences in 29% of the comparisons.

10. When asked to indicate the extent to which they found their classroom programs to be physically exhausting, the Follow-Through teachers were again the least satisfied ($\bar{X}$ = 3.3) while the Project Read teachers had the highest mean response (4.7). When the responses of the three groups of teachers were compared, there were consistent differences in 23% of the comparisons.

11. When the teachers were asked how they felt about the progress of their students in their classroom program, the Follow-Through teachers were considerably more satisfied ($\bar{X}$ = 6.2) and the Project Read teachers were the least satisfied ($\bar{X}$ = 4.8). When the responses of the three groups of teachers were compared, there were consistent differences in 28% of the comparisons.

12. When the teachers were asked how they felt about their own personal intellectual growth which might be attributed to their classroom program, the differences were slight. The Follow-Through teachers had the lowest mean response (4.6) and the Basal Reading teachers had the highest (5.5). When the answers of the three groups of teachers were compared, there were consistent differences in only 14% of the comparisons.

13. Most teachers, no matter the program, were generally satisfied with their own professional growth. The differences between the mean response rates were slight. When the responses of the three groups of teachers were compared, there were consistent differences in only 5% of the comparisons.

14. The Follow-Through teachers were somewhat more likely to state that they were more satisfied with their program in general ($\bar{X}$ = 5.4) while the Project Read teachers were somewhat less satisfied ($\bar{X}$ = 4.9). When the answers given by the three groups of teachers were compared, there were consistent differences in 19% of the comparisons.

15. The teachers were mixed in their responses when asked to indicate their satisfaction with the contacts that they have been able to make with parents. The mean responses of the three groups of teachers were similar (5.0, 4.6, 5.0), and when the responses were compared, there were consistent differences in only 4% of the comparisons.

16. Follow-Through teachers were considerably more satisfied with the adequacy of the in-service training for their classroom programs ($\bar{X}$ = 5.3) and the Basal Reading teachers had the lowest mean response (3.4). When the responses of the three groups of teachers were compared, there were consistent differences in 39% of the comparisons.

17. The Follow-Through teachers were considerably more satisfied with the testing procedures required for their classroom program ($\bar{X}$ = 5.3) than were the Project Read teachers ($\bar{X}$ = 3.8) and the Basal Reading teachers ($\bar{X}$ = 3.4). When the answers of the three groups of teachers were compared, there were consistent differences in 33% of the comparisons.

A similar set of items were designed to assess teachers' satisfaction with their schools and with teaching as a career (see Appendix B, Items #21-28). These items are presented in abbreviated form in Table 4.21. As may be seen in Table 4.21, the teachers from the three different programs tended to give quite similar types of responses. The variation between groups is rather small; this suggests that, although teachers may hold varying attitudes about their respective programs, their attitudes toward their occupation are quite similar.

TABLE 4.21

Teachers' Satisfaction With School Setting and Teaching As A Career

Satisfaction Indicator	Values 1 Would reject opportunity	2 Hesitate to accept opportunity	3 Uncertain	4 Probably accept opportunity	5 Would grasp the opportunity	$\bar{X}$	θ
Remain in present classroom program for remainder of career							
Follow-Through teachers	6	3	4	8	0	2.6	
Project Read teachers	6	0	2	5	2	2.8	
Basal Reading teachers	5	3	14	4	0	3.1	.07
TOTAL	17	6	20	17	2		
Remain in present school, but in different program							
Follow-Through teachers	4	7	6	3	1	2.5	
Project Read teachers	3	4	5	2	1	2.6	
Basal Reading teachers	5	0	7	13	2	3.4	.28
TOTAL	12	11	18	18	4		
Remain in present program, but move to school in higher SES neighborhood							
Follow-Through teachers	11	6	2	1	1	1.8	
Project Read teachers	5	5	4	1	1	2.1	
Basal Reading teachers	11	5	7	3	0	2.5	.12
TOTAL	27	16	13	5	2		
Obtain teaching job with more decision making opportunities							
Follow-Through teachers	0	6	6	6	3	3.3	
Project Read teachers	1	2	5	4	3	3.4	
Basal Reading teachers	4	4	8	8	2	3.4	.12
TOTAL	5	12	19	18	8		

TABLE 4.21 (Con't.)

Satisfaction Indicator	Values 1 Would reject opportunity	2 Hesitate to accept opportunity	3 Uncertain	4 Probably accept opportunity	5 Would grasp the opportunity	$\bar{X}$	θ
Obtain teaching job that is less physically demanding							
Follow-Through teachers	4	9	2	5	1	2.5	
Project Read teachers	4	6	3	2	0	2.2	
Basal Reading teachers	7	5	8	5	1	3.0	.09
TOTAL	15	20	13	12	2		
Obtain teaching job that is more flexible, more chance for innovation							
Follow-Through teachers	2	3	5	6	5	3.4	
Project Read teachers	0	0	7	3	5	3.8	
Basal Reading teachers	5	2	4	14	1	3.5	.17
TOTAL	7	5	16	23	11		
Obtain a higher paying position outside the field of education							
Follow-Through teachers	9	2	8	1	1	2.2	
Project Read teachers	8	1	5	1	0	1.9	
Basal Reading teachers	16	4	4	1	0	2.4	.19
TOTAL	33	7	17	3	1		
Obtain a higher paying position within the field of education							
Follow-Through teachers	4	0	7	4	5	3.5	
Project Read teachers	2	1	3	5	3	3.8	
Basal Reading teachers	3	4	9	7	2	3.7	.14
TOTAL	9	5	19	16	10		

For each question, the teachers in each program tended to respond in the same direction. Some general attitudes are as follows:

1. In less than 7% of the comparisons of the responses between the three groups of teachers there were consistent differences in the expressed desires of teachers to remain in their present classroom programs for the remainder of their careers. Nearly one-third of all teachers (31%) were uncertain; about one-third would reject this opportunity (36%), and a similar proportion would accept such a career. The Basal Reading teachers expressed the greatest amount of uncertainty ($\bar{X}$ = 3.1) and the Follow-Through teachers, who are generally younger, appear to be more hesitant ($\bar{X}$ = 2.6).

2. In 28% of the comparisons of the teachers' responses to the opportunity of remaining in their present school and teaching in a different classroom program, there were consistent differences between the three groups of teachers. A minority of Follow-Through and Project Read teachers would accept this opportunity ($\bar{X}$ = 2.5 and 2.6); but a majority of Basal Reading teachers would appear likely to do so ($\bar{X}$ = 3.4).

3. The majority of teachers in all programs would reject the opportunity of teaching their present classroom program in a school located in a neighborhood with a higher socio-economic status level. While the Follow-Through teachers were the more adamant in their refusal, a difference of only 12% was obtained when the responses given by the three groups of teachers were compared.

4. A slight majority of all teachers (41%) would prefer a teaching position with greater decision-making opportunities, although 30% are uncertain. Although a slightly greater proportion of the Basal Reading teachers would not wish to assume any additional decision-making powers, a difference of only 12% was found in comparing the responses given by the three groups of teachers.

5. Over two-thirds of all teachers (64%) would turn down a teaching job that was less physically demanding upon them. Only a small minority of teachers from any program would make this kind of a move; in comparing the responses made by the three groups of teachers, a difference of only 9% was obtained.

6. Over half (52%) of all teachers would prefer a teaching position which allowed more flexibility and a greater chance for innovation. None of the Project Read teachers would readily dismiss such an opportunity ($\bar{X}$ = 3.8). Surprisingly, the mean response of the Follow-Through teachers is similar to that of the Basal Reading teachers (3.4 and 3.5). In comparing the responses given by the three groups of teachers, however, a difference of only 17% was found.

7. The large majority of all teachers (63%) would turn down a higher paying job outside of the field of education; 27% are uncertain and only 7% would take such an opportunity into consideration. In comparing the responses given by the three groups of teachers, a difference of only 19% could be found.

8. While the majority of teachers (41%) would accept a higher paying position within the field of education, only 16% would "grasp" such an opportunity. Thirty percent of the teachers are uncertain. There appears to be little difference between the three groups of teachers, for when the responses were compared there were consistent differences in only 14% of the comparisons.

Teachers' Perceptions of the Attitudes and Characteristics of Follow-Through, Project Read and Basal Reading Program Pupils

A good deal has been written about teachers' perceptions of inner city pupils; teachers' expectations for various students and the consequent fulfilling of such expectations; and the manner in which the perceptions that teachers have of their pupils may influence their behavior and instructional endeavors. With this in mind, a number of questions were formulated in an attempt to determine whether variations in teacher expectations and perceptions might be associated with the type of program in which the teachers were employed (see Appendix B, Items #29-38). These items are presented in abbreviated form in Table 4.22. Each teacher was requested to estimate what percentage of the pupils in her classroom program might be characterized by each descriptive statement. The actual frequencies of the teachers' responses, the mean responses for each group of teachers, and the θ values are presented for each descriptive statement. The findings and the interpretations of the results are as follows:

1. Most teachers feel that the majority of their pupils are interested in school work. The mean percentage estimates are quite similar (Follow-Through, 79%; Project Read, 71%; and Basal Reading, 78%). The amount of interest that the teachers feel the pupils have in school work has little relationship to the type of classroom program, for when the responses given by the three groups of teachers were compared, there were consistent differences in only 16% of the comparisons.

2. The Follow-Through teachers seem to feel a somewhat higher proportion of their students ($\bar{X}$ = 24%) create discipline problems for them than do Project Read teachers ($\bar{X}$ = 16%) or the Basal Reading teachers ($\bar{X}$ = 12%). The differences between programs, however, is not great; in comparing the responses of the three groups of teachers, there were consistent differences in only 18% of the comparisons.

3. Most teachers felt that a smaller proporation of their pupils were discipline problems at home than at school. The mean responses for the Follow-Through, Project Read and Basal Reading teachers were 9%, 10% and 10% respectively. In comparing the responses among the three groups of teachers, there were consistent differences in only 7% of the comparisons.

TABLE 4.22

Teachers' Perceptions and Expectations of Pupils Enrolled in Follow-Through, Project Read and Basal Reading Programs

Attitudes and Characteristics of Pupils	Percentage of Pupils in Each Program											
	0-9%	10-19%	20-29%	30-39%	40-49%	50-59%	60-69%	70-79%	80-89%	90-100%	$\bar{X}$	θ
Interested in school work												
Follow-Through	0	0	0	1	0	3	0	1	3	13	74%	
Project Read	0	1	0	0	0	1	4	1	2	6	71%	
Basal Reading	0	0	1	0	0	1	3	2	9	12	78%	.16
TOTAL	0	1	1	1	0	5	7	4	14	31		
Are discipline problems in class												
Follow-Through	5	4	5	2	2	1	0	0	0	2	24%	
Project Read	3	6	3	1	0	2	0	0	0	0	16%	
Basal Reading	6	14	4	4	0	0	0	0	0	0	12%	.18
TOTAL	14	24	12	7	2	3	0	0	0	2		
Are discipline problems at home												
Follow-Through	9	6	5	1	0	0	0	0	0	0	9%	
Project Read	5	5	4	1	0	0	0	0	0	0	10%	
Basal Reading	7	15	4	2	0	0	0	0	0	0	10%	.07
TOTAL	21	26	13	4	0	0	0	0	0	0		
Don't have intellectual capacity to do class work												
Follow-Through	12	3	2	1	1	0	0	0	2	0	14%	
Project Read	7	5	0	0	2	0	0	0	0	1	14%	
Basal Reading	12	8	5	1	0	0	0	1	0	1	13%	.06
TOTAL	31	16	7	2	3	0	0	1	2	2		
Were prepared to do work you expected in class												
Follow-Through	2	2	1	1	1	1	2	0	4	7	58%	
Project Read	2	0	1	2	1	2	3	2	1	1	47%	
Basal Reading	2	1	1	0	1	4	2	5	1	11	65%	.22
TOTAL	6	3	3	3	3	7	7	7	6	19		
Will be prepared for work next year												
Follow-Through	1	0	0	0	0	1	3	0	4	12	77%	
Project Read	1	0	0	1	0	1	2	4	5	1	65%	
Basal Reading	0	0	0	0	0	1	3	5	9	10	78%	.32
TOTAL	2	0	0	1	0	3	8	9	18	23		

TABLE 4.22 (Con't.)

Attitudes and Characteristics of Pupils	Percentage of Pupils in Each Program											
	0-9%	10-19%	20-29%	30-39%	40-49%	50-59%	60-69%	70-79%	80-89%	90-100%	$\bar{X}$	θ
Probably will go on to college												
Follow-Through	3	2	3	4	1	2	0	1	2	3	40%	
Project Read	1	3	3	2	2	3	0	0	1	0	30%	
Basal Reading	2	5	4	4	1	4	6	1	1	0	35%	.10
TOTAL	6	10	10	10	4	9	6	2	4	3		
Probably will drop out of school												
Follow-Through	9	9	1	1	1	0	0	0	0	0	8%	
Project Read	2	5	3	2	1	2	0	0	0	0	20%	
Basal Reading	6	10	10	1	0	0	1	0	0	0	14%	.33
TOTAL	17	24	14	4	2	2	1	0	0	0		
Like to go to school												
Follow-Through	2	0	0	0	0	2	1	1	5	10	72%	
Project Read	0	0	0	0	1	1	1	0	2	10	80%	
Basal Reading	0	0	0	0	0	2	0	3	4	19	83%	.16
TOTAL	2	0	0	0	1	5	2	4	11	39		
Dislike going to school												
Follow-Through	12	3	3	1	0	0	0	0	0	2	14%	
Project Read	7	5	1	1	0	1	0	0	0	0	10%	
Basal Reading	15	9	2	1	0	1	0	0	0	0	7%	.06
TOTAL	34	17	6	3	0	2	0	0	0	4		

4. Nearly half of the teachers (48%) felt that the percentage of pupils who did not have the intellectual capacity to do their work in class was less than 10%. The mean responses were 14%, 14% and 13%. It should be noted that 7% of the teachers felt that from 70-100% of their pupils might be characterized by this statement. There were no differences between programs; in comparing the responses made by the three groups of teachers, there were consistent differences in only six percent of the comparisons.

5. The teachers were quite mixed in their estimates of the percentage of pupils that they had who were adequately prepared to do the work that was expected of them in class this year. The mean response for the Follow-Through teachers was 58%; 47% for Project Read teachers; and 65% for Basal Reading teachers. In comparing the responses made by the three groups of teachers, there were consistent differences in 28% of the comparisons.

6. The majority of all teachers (62%) feel that from 80-100% of their pupils will be adequately prepared to do the work that other teachers expect of them when they enter class next year. The mean responses for the Follow-

Through, Project Read and the Basal Reading teachers were 77%, 64% and 78%. In comparing the responses given by the three groups of teachers, there were consistent differences in 32% of the comparisons. This finding, along with the previous one, suggests that the Project Read teachers may be less sure about the success of their program than are the Follow-Through and the Basal Reading teachers. The latter two groups are equally certain that their pupils will be adequately prepared for next year.

7. There was a considerable amount of variation among all teachers in their predictions about the percentage of their pupils that would probably go on to some type of college. Only three Follow-Through teachers predicted that as many as 90-100% of their pupils might do so. The mean responses for the three groups of teachers were: Follow-Through, 40%; Project Read, 30%; and Basal Reading, 35%. In comparing the responses from these three groups, there were consistent differences in only 10% of the comparisons, suggesting that there is little difference between the three programs.

8. When the three groups of teachers were asked to estimate the percentage of their pupils who would probably drop out of high school before graduation, there was a consistent difference of 33% in the comparisons of their responses. The mean response rate for Follow-Through teachers was only 8%; for Project Read teachers, it was 20%; and 14% for the Basal Reading teachers. It appears, then, that the Follow-Through teachers have considerably higher expectations that their pupils shall remain in school until graduation.

9. The majority of all teachers (61%) felt that from 90-100% of their pupils genuinely seemed to like to go to school. The mean response rates for the Follow-Through, Project Read and Basal Reading teachers were 72%, 80% and 83% respectively. In comparing the responses from the three groups of teachers, there were consistent differences in only 16% of the comparisons.

10. Over half of the teachers (53%) felt that the percentage of pupils who genuinely seemed to dislike going to school ranged from zero to nine percent. The mean responses for the three groups of teachers were: Follow-Through, 14%; Project Read, 10%; and Basal Reading, 7%. When the responses from the three groups were compared, there were consistent differences in only six percent of the comparisons.

Summary: Teacher Perceptions and Expectations of Their Pupils

Most teachers feel that the majority of their pupils are interested in school work. The differences between the three experimental education programs were slight: the Project Read teachers had a slightly lower average estimate (71%) than did the Follow-Through and Basal Reading teachers (79% and 78%). Follow-Through teachers, on the other hand, were more likely to report a higher average percentage of their students as constituting discipline problems for them (24%) as compared to Project Read (16%)

and Basal Reading teachers (12%). The difference between the three programs, however, were slight. The teachers seem to feel that their pupils are less of a problems at home; the teachers from all programs estimated that the average percentage of pupils who were discipline problems at home was around ten percent.

The Basal Reading teachers seemed to feel that a greater average percentage of their pupils were prepared to do the work that was expected of them this year (65%) than did the Follow-Through teachers ($\bar{X}$ = 58%) or the Project Read teachers ($\bar{X}$ = 47%). The teachers in all programs, however, seemed to feel as if they had exerted an impact upon their students this year: when they were asked to estimate the percentage of their pupils who will be adequately prepared to do the work that other teachers will expect of them next year, the Follow-Through teachers had an average estimate of 77% of their pupils, with 64% for Project Read and 78% for the Basal Reading teachers. The expectations that the Follow-Through teachers hold for their black, inner city pupils, then, are quite comparable to those that the Basal Reading teachers have for their white, more economically advantaged students. The Project Read teachers appear to feel that their pupils were less prepared when they got them, and will be less prepared when they reenter school next year.

These same kinds of differences were obtained when the three groups of teachers were asked to state their expectations for the future educational attainment of their pupils. The Follow-Through and Basal Reading teachers had slightly higher average estimates about the percentage of their pupils that would go on to some type of college (40% and 35%) than did the Project Read teachers (30%). Again, the Follow-Through and the Basal Reading teachers had a lower average estimate of the percentage of their pupils that would drop out of high school (8% and 14%) than did the Project Read teachers (20%).

The Basal Reading teachers indicated that a slightly higher degree of positive effect toward school existed among their students. They reported that the average

percentage of their pupils who genuinely seemed to like school was 83% as compared to the average estimate of 72% for Follow-Through teachers and 80% for Project Read. Correspondingly, the Basal Reading teachers, when asked how many of their pupils genuinely disliked going to school, had a mean response rate of eight percent as compared with 14% for Follow-Through and 10% for Project Read.

In summary, it does seem as if there are a number of indicators which, due to their consistency, lead to the conclusion that the Follow-Through program has an impact upon teachers' expectations. In nearly all measures, with the exception of those dealing with positive effect toward school, the Follow-Through teachers held perceptions and expectations of their students which corresponded to those that the Basal Reading program teachers had for their pupils. To the extent that one of the objectives of the Follow-Through program might be that of modifying teacher expectations for black inner city pupils, then, this program has been a success.

Teachers Perceptions of Parental Attitudes and Characteristics

In recent years, a great deal of discussion has been addressed to the role that parents should or should be able to play in the educational process. In attempting to account for this, the Follow-Through program has established a Parental Advisory Council as a means of incorporating a greater extent of parental involvement. There are, of course, a great number of inherent problems attached to such an endeavor, particularly in a large metropolitan area. Very often, for example, a parent may find that each child is going to a separate school, some of which may be at a considerable distance from home. When parent-teacher conferences are held throughout the entire school system, a single parent may find that he is expected to attend three or four different school buildings at the same time. Similar demands may be made in the area of school programs, carnivals, and other participatory schemes. Again, given that the parent may have children located in different schools, he is

often required to pay duplicate dues for each Parent-Teacher Association that he wishes to join. These are only a few of the problems which parents and educators may have to contend with in a large school system.

One part of this evaluation, then, has been designed to examine how teachers have been able to deal with and feel about the parents of their pupils (see Appendix B, Items #39-45). The distribution of responses from the teachers in each program, the mean of the responses by program, and θ values are presented in Table 4.23. The interpretation of the results of these questionnaire items are presented in the following pages.

TABLE 4.23

Teachers' Perceptions of Parental Attitudes and Characteristics, by Program

Attitudes and Characteristics of Parents	Percentage of Parents with Children in Each Program											
	0-9%	10-19%	20-29%	30-39%	40-49%	50-59%	60-69%	70-79%	80-89%	90-100%	$\bar{X}$	θ
Interested in childrens' school performance												
Follow-Through	1	1	1	0	1	1	2	2	3	9	68%	
Project Read	0	1	0	1	0	2	0	1	2	8	72%	
Basal Reading	0	1	0	1	0	3	1	3	9	10	74%	.07
TOTAL	1	3	1	2	1	6	3	6	14	27		
Cooperate when help is requested												
Follow-Through	0	1	3	0	1	5	0	2	1	9	65%	
Project Read	0	1	0	2	1	1	0	1	3	6	67%	
Basal Reading	0	1	2	1	0	1	1	5	9	8	70%	.03
TOTAL	0	3	5	3	2	7	1	8	13	23		
Are extremely critical of program												
Follow-Through	16	2	0	1	0	1	0	0	0	1	9%	
Project Read	12	3	0	1	0	0	0	0	0	0	3%	
Basal Reading	22	4	0	0	0	0	0	0	0	0	3%	.04
TOTAL	50	9	0	2	0	1	0	0	0	1		
Won't care if children drop out of school												
Follow-Through	15	1	2	2	0	0	0	0	0	1	9%	
Project Read	6	3	3	2	0	1	0	0	0	0	13%	
Basal Reading	13	8	5	1	1	0	0	0	0	0	9%	.19
TOTAL	34	12	10	5	1	1	0	0	0	1		

TABLE 4.23 (Con't.)

Attitudes and Characteristics of Parents	Percentage of Parents with Children in Each Program											
	0-9%	10-19%	20-29%	30-39%	40-49%	50-59%	60-69%	70-79%	80-89%	90-100%	$\bar{X}$	θ
Percent of parents I have talked to about childrens' behavior												
Follow-Through	2	1	6	2	0	1	0	0	1	8	49%	
Project Read	1	1	2	0	1	1	1	1	0	7	60%	
Basal Reading	5	4	3	4	0	1	1	0	1	9	43%	.16
TOTAL	8	6	11	6	1	3	2	1	2	24		
Percent of parents I have been able to contact when necessary												
Follow-Through	1	4	1	0	0	1	0	2	4	8	61%	
Project Read	1	1	0	0	0	0	0	1	1	11	76%	
Basal Reading	0	3	0	1	0	1	1	3	5	14	72%	.22
TOTAL	2	8	1	1	0	2	1	6	10	33		
Percent of parents that should have been contacted more often												
Follow-Through	8	4	2	3	0	1	1	0	1	1	21%	
Project Read	4	6	0	1	1	1	0	0	1	1	23%	
Basal Reading	6	10	8	0	1	1	0	1	0	1	18%	03
TOTAL	18	20	10	4	2	3	1	1	2	3		

1. The majority of teachers (65%) reported that an average of from 80-100% of the parents were interested in the school performance of their children. The Basal Reading teachers had a higher average estimate of the percentage of interested parents (74%) than did Follow-Through (68%) and Project Read (72%). The differences between the three programs were negligible, however, for when the responses from the three groups of teachers were compared there were consistent differences in only 7% of the comparisons.

2. Over half of the teachers (54%) reported that an average of from 80-100% of the parents cooperate when their help is requested. The difference between the three programs was minimal: when comparisons were made among the responses of the three groups of teachers, there were consistent differences in only three percent of the comparisons. The average estimates of the parents who cooperate with Follow-Through teachers was 65% as compared with 67% of the Project Read teachers and 70% of the Basal Reading teachers.

3. A large majority of all teachers (78%) reported that an average of from zero to nine percent of the parents were extremely critical of their classroom program. Follow-Through teachers seem to experience slightly more criticism, for their mean response was that 9% of the parents were extremely

critical as compared with an average estimate of 3% for both Project Read and Basal Reading teachers. The difference between programs, however, is again negligible; when the responses given by the three groups of teachers were compared, there were consistent differences in only four percent of the comparisons.

4. Over half of the teachers (53%) state that less than 9% of the parents probably would not care if their children would drop out of high school. The Project Read teachers reported a slightly higher average percentage of such parents (13%) than did Follow-Through and Basal Reading teachers (nine percent each). In comparing the responses to this question made by the three groups of teachers, there were consistent differences in 19% of the comparisons.

5. Only slightly more than one-third of the teachers (38%) have talked to more than 90% of the parents about their children's behavior. The Project Read teachers have talked to a higher average percentage of parents (60%) than have either the Follow-Through teachers ($\bar{X}$ = 49%) or the Basal Reading teachers ($\bar{X}$ = 43%). When the responses by the three groups of teachers were compared, there were consistent differences in only 16% of the comparisons.

6. The teachers have not been highly successful in contacting parents as often as they feel is necessary. Only slightly more than half (51%) have been able to contact from 91-100% of the parents as often as necessary. The Project Read teachers have been the more successful, with an average estimate of 76% as compared to 61% for the Follow-Through teachers and 72% for Basal Reading teachers. When the responses were compared from the three groups of teachers, there was a consistent difference in 22% of the comparisons.

7. When the teachers were asked to state the percentage of parents with whom they should have been able to have much more extensive contact, the Follow-Through teachers had an average estimate of 21% as compared to 23% for Project Read teachers and 18% for the Basal Reading teachers. When the responses were compared between the three groups, there were consistent differences in only three percent of the comparisons.

Summary: Teachers Perceptions of Parental Attitudes and Characteristics

There were few discernible differences in teachers' perceptions of parental attitudes and characteristics which might be attributable to the type of educational program in which the pupils were enrolled. Most teachers felt that the majority of parents were interested in their children's school work, irrespective of the type of program. Most teachers, no matter the type of program, are successfully able to establish contact with two-thirds to three-fourths of the parents; most teachers would have liked to have been able to reach approximately 20% more of the parents. Project Read teachers

seem to experience slightly more criticism about their classroom program, but they have also been able to establish contact with a slightly higher proporation of the parents.

Accountability: Its Impact on Teachers

One of the controversial issues in education today centers on the notion of accountability. While there may be some who feel that a greater emphasis on accountability may infringe upon a teacher's sense of autonomy and professionalism, a recent Gallup poll shows that as much as 75% of the American public would favor a system under which national tests of student achievement would be given to pupils and the local teachers and administrators held accountable for their students' scores.

The three different programs assessed in this project, as previously elaborated, do possess varying kinds of structural arrangements and administrative procedures designed to maintain surveillance over teachers and their efforts. When the teachers were asked if they felt that they were held more accountable because of their school program (see Appendix B, Item #53), a correlation analysis indicated that the programs definitely did differ in the extent of perception of accountability held by teachers in the program ($r = .70$). In other words, with the use of this single questionnaire item, one could accurately predict which program a teacher was employed in nearly 50% of the time. By controlling for program type, correlation scores can be compared both with each other and with total scores to provide an indication of the relative effects of each level of accountability upon teachers' attitudes and satisfaction. For purposes of analysis, the three programs have been trichotomized into high (Follow-Through), medium (Project Read) and low (Basal Reading) accountability groups. The rationale for this has been discussed in Chapter One under the Sections dealing with Organizational Complexity and Specialization.

The majority of teachers in all three programs appear to be generally satisfied with the levels of accountability which are expected of them. When they were asked how they felt about the extent of accountability they had for their students' performance (see Appendix B, Item #54), the results were as follows:

	Satisfied with Extent of Accountability	Dissatisfied with Extent of Accountability
Follow-Through teachers	76% (16)	19% (4)
Project Read teachers	80% (12)	20% (3)
Basal Reading teachers	96% (27)	4% (1)
TOTAL	86% (55)	12% (8)

The majority (86%) of the teachers were satisfied with the extent of accountability that they had for their students' performance, no matter what program they were involved in. It is of interest to note that the responses were quite similar between the high and low accountability groups, i.e., Follow-Through and Basal Reading. Although there were a few more teachers from the Follow-Through program who reported that they were dissatisfied with the extent of accountability required of them, they are also required to undergo much more stringent supervision and accountability requirements. The lack of any greater difference between the three groups indicates that teachers can adapt quite readily to more rigorous requirements for accountability.

Furthermore, nearly all of the teachers felt that they should, in fact, be held accountable for their students' performance. When asked this question (see Appendix B, Item #56), the results were as follows:

	Teachers Should Be Held Accountable For Student Performance	Teachers Should Not Be Held Accountable For Student Performance
Follow-Through teachers	90% (19)	10% (2)
Project Read teachers	93% (14)	0% (0)
Basal Reading teachers	85% (24)	8% (2)
TOTAL	89% (57)	6% (4)

Thus, nearly all of the teachers (89%) felt that they should be held accoutable for the performance of their students. When the teachers were asked if they felt that they were actually held more accountable due to the nature of their school program (see Appendix B, Item #53), there was a distinct difference between the three groups of teachers. The responses to this question were as follows:

	Are more accountable because of program	Are less accountable because of program
Follow-Through teachers	95% (20)	5% (1)
Project Read teachers	40% (6)	60% (9)
Basal Reading teachers	11% (3)	86% (24)
TOTAL	55% (29)	53% (34)

These findings reflect a distinct difference between the three different programs and do, in fact, represent the variations in supervision and surveillance between the three programs as described in an earlier section of this report. Most Follow-Through teachers feel that they are and should be held accountable for their students' performance. Most Basal Reading teachers also feel that they should be held accountable, but their program demands little from them in this respect.

One of the major concerns of many educators, of course, is that the demands and requirements of greater accountability from teachers may have an impact upon teaching performance. Many advocates claim that such demands will enhance teaching efforts; many critics feel that such accountability may detract from the teachers' sense of professionalism and have a negative impact upon their performance. Hence, the teachers were asked to state their feelings about how the degree of accountability expected from them might have affected their teaching performance. (See Appendix B, Item #55.) The following responses were obtained:

	Accountability has improved my performance and sense of professionalism	Accountability has hindered my performance	Has had no effect
Follow-Through teachers	48% (10)	28% (6)	24% (5)
Project Read teachers	46% (7)	7% (1)	40% (6)
Basal Reading teachers	43% (12)	4% (1)	46% (13)
TOTAL	46% (29)	13% (8)	38% (24)

Teacher accountability does indeed appear to influence performance and feelings about the sense of professionalism. The Follow-Through teachers are more likely to feel the influence, both positively and negatively. Nearly half (48%) of the Follow-Through teachers felt that accountability improved their performance; but over one-fourth of them felt that is hindered their performance. Although a similar proportion of teachers from the other two programs reported that their performance and sense of professionalism had been enhanced, few of the Basal Reading and Project Read teachers reported any negative impact upon their performance. As previously noted, however, these were the teachers who felt that they were even less accountable due to the nature of their programs. A considerable proportion of the Basal Reading and Project Read teachers felt that the requirements for accountability in their programs had no effects upon them whatsoever; again, one-fourth of the Follow-Through teachers felt that this was the case in their situation. It would be beneficial to provide a more extensive examination of those Follow-Through teachers who reported negative feelings; due to the small size of the sample, however, no adequate control measures can be employed for a more refined statistical analysis.

One aspect which might accompany the introduction of greater accountability into a school setting is the fact that teachers may find that their work load is increased: paper work, reports and other evaluative techniques could result in an appreciably greater amount of work. Accordingly, when asked this question (see Appendix B, Item #57), most teachers did feel that high accountability created more work, as indicated by the following responses:

	Accountability creates more work	Accountability does not create more work
Follow-Through teachers	81% (17)	10% (2)
Project Read teachers	93% (14)	0% (0)
Basal Reading teachers	58% (16)	38% (11)
TOTAL	74% (47)	21% (13)

The majority of the teachers from all programs felt that the extent of accountability in their programs did create more work for them. Surprisingly, more Project Read teachers expressed this feeling than did the Follow-Through teachers, even though the latter work in a more highly structured setting. A considerably greater proportion of the Basal Reading teachers (38%) felt that little extra work was demanded from them under their system of accounting for student performance.

To the extent that there is more work required with a system of higher accountability, it may be assumed that there are pressures exerted from various sources to ensure that the work is completed. Hence, the teachers from the different programs were asked to indicate which single source produced the greatest pressures upon them in their work (see Appendix B, Item #56). The results were:

	The Greatest Single Source of Pressure Comes From:		
	Administrators	Parents	Other Teachers
Follow-Through teachers	86% (18)	5% (1)	10% (2)
Project Read teachers	40% (6)	13% (2)	47% (7)
Basal Reading teachers	43% (12)	18% (5)	18% (5)
TOTAL	56% (36)	13% (8)	22% (14)

The Follow-Through teachers clearly feel that administrators exert much more pressure upon them than is the case for the other two groups of teachers. The Follow-Through teachers, as compared with the other two groups, are unanimous in their agreement that the administrators of their program exert the greatest pressure upon them (86%). On the other hand, a majority of the Project Read teachers (47%) feel that their peers exert the most pressure upon them in their performance as

teachers. A somewhat larger proportion of the Basal Reading teachers (18%) reported that parents constituted the greatest source of pressure than did the other two groups of teachers (5% and 13%). This may be partially explained by the fact that more students may be bussed into the other two programs, perhaps partially reducing teacher-parent interaction.

Next, the teachers were asked to indicate the extent to which they felt that they were held accountable by both administrators and parents. These dimensions were assessed by asking "How accountable for your students' performance do you feel you are held by (1) parents and (2) administrators?" (See Appendix B, Items #51-52.) The responses were as follows:

	Extent Held Accountable by Parents			
	Very Accountable	Moderately Accountable	Unsure	Not Accountable
Follow-Through teachers	52% (11)	29% (6)	14% (3)	5% (1)
Project Read teachers	80% (12)	13% (2)	7% (1)	0% (0)
Basal Reading teachers	21% (6)	61% (17)	14% (4)	4% (1)
TOTAL	45% (29)	39% (25)	13% (8)	3% (2)
	Extent Held Accountable by Administrators			
Follow-Through teachers	71% (15)	19% (4)	10% (2)	0
Project Read teachers	47% (7)	27% (4)	27% (4)	0
Basal Reading teachers	36% (10)	50% (14)	14% (4)	0
TOTAL	50% (32)	34% (22)	16% (10)	0

Once again, the Follow-Through teachers' reports reflect the high degree of supervision which is maintained over them. The differences in the extent to which the three groups of teachers feel that they are held accountable by their administrators are in the direction that would have been predicted on the basis of the information provided in the earlier section on program descriptions. Nearly all of the teachers also feel that parents expect them to be accountable for their teaching performance. The Project Read teachers seem to feel that the parents of their pupils are somewhat more exacting; the Basal Reading teachers seem to experience a more moderate degree of pressure from the parents. In conjunction with the fact that the

Basal Reading teachers were more likely to see the parents as exerting the greatest source of pressure upon them, it might be surmised that relatively little pressure is applied to them in most cases.

Summary: Teacher Accountability

The majority of teachers, be they from Follow-Through, Project Read or the Basal Reading Program, stated that they are generally satisfied with the levels of accountability expected from them in their particular programs. Furthermore, the teachers generally agreed that they should, in fact, be held accountable for their teaching performance. The majority of the Follow-Through teachers felt that the nature of their program demanded a high degree of accountability from them; Project Read and Basal Reading teachers, however, reported considerably lower levels of accountability were expected from them. Nearly half of the Follow-Through teachers felt that the higher levels of accountability demanded from them improved their performance or enhanced their sense of professionalism; one-fourth of them felt that these requirements hindered their performance while another 25% stated that their behavior had not been affected. Project Read and Basal Reading teachers were considerably more likely to state that the levels of accountability expected from them had had no effect on their performance; about one-third of the teachers from each of these two groups believed that their teaching performance had been improved. There was a general agreement among all teachers that higher levels of accountability did create more work for them, but the extra work did not appear to increase dissatisfaction with their job.

The Follow-Through teachers reported that administrators, who held very high levels of accountability for them, created the single greatest source of pressure for them. Project Read teachers were split in their opinion: 40% felt that the administrators constituted the greatest source of pressure and 47% said that they experienced the greatest impact from their peer group. Project Read teachers also seemed to feel that parents held them more accountable than was true of the other groups of teachers.

PART III - THE PARENTS

This section deals with parental attitudes toward their children, the experimental programs their children are enrolled in, and the schools which they attend. A team of graduate students from Western Michigan University Department of Sociology was assigned to conduct interviews with approximately 90 parents, 30 of which had children enrolled either in Project Follow-Through, Project Read, or the Basal Reading Program. This team of graduate students was able to successfully complete interviews with 27 parents who had children in the Follow-Through program, 25 with children in Project Read, and 29 who had children enrolled in the Basal Reading program.

In addition to obtaining information from parents which was essential for this particular evaluative study, the graduate students were also requested to formulate (1) individual research problems which could be addressed to this particular population, (2) design appropriate instruments for data collection, (3) include these within the larger interview schedule, and (4) submit a report of their findings. These separate research reports are included in the section entitled "Related Studies" which is appended to this major report.

Characteristics of the Parent Population

The distribution of the racial identification of the parents approximated that which was found for the students in each program. This was as follows:

	Black	White	Chicano	Other
Follow-Through parents	18 (67%)	5 (19%)	1 (4%)	3 (11%)
Project Read parents	20 (80%)	0 (0%)	0 (0%)	5 (20%)
Basal Reading parents	0 (0%)	26 (90%)	1 (3%)	2 (7%)

The large majority of the parents of pupils in Follow-Through and Project Read are black, and no black parents have children in the Basal Reading program.

In order to determine whether there might be differences between the three groups of parents regarding socio-economic status characteristics, questions were asked concerning the level of educational attainment and the occupational position of the head of the household and the occupation of the spouse. The distribution of these characteristics are portrayed in the following illustrations:

Parental Levels of Educational Attainment
(Head of Household)

	Follow-Through Parents	Project Read Parents	Basal Reading Parents
8th grade or less	5 (19%)	3 (12%)	4 (14%)
Some high school	8 (30%)	7 (28%)	8 (28%)
High school graduate	7 (26%)	9 (36%)	9 (31%)
Secretarial, trade or business school	2 (7%)	0 (0%)	0 (0%)
Some college	2 (7%)	1 (4%)	3 (10%)
College graduate	1 (4%)	1 (4%)	3 (10%)
No response	2 (7%)	4 (16%)	4 (14%)

The differences between the levels of education attained by the heads of the households were not great among the three samples of parents. The proportions of parents falling into the categories ranging from "High school graduate" and below are quite similar. There is a slight difference among the three groups of parents at the college level; a few more of the Basal Reading parents have gone on to or graduated from college.

The parent respondents were then asked to name the occupational position of the head of the household. The distribution of occupations, as categorized by occupational prestige level, occurred in the parental samples in the following manner:

Occupational Prestige Level of the Head of the Household

	Follow-Through Parents	Project Read Parents	Basal Reading Parents
Professional, technical (includes teachers)	1 (4%)	0 (0%)	1 (3%)
Business manager, official, proprietor	2 (7%)	1 (4%)	6 (21%)
Skilled, craftsman, foreman, kindred worker	6 (22%)	0 (0%)	6 (20%)
Semi-skilled, clerical, sales worker, teacher aide	2 (7%)	5 (20%)	2 (7%)
Unskilled, service, domestic worker	9 (33%)	12 (48%)	12 (41%)
Housewife	1 (4%)	1 (4%)	0 (0%)
Unemployed, relief, ADC	3 (11%)	5 (20%)	1 (3%)
No information	3 (11%)	1 (4%)	1 (3%)

Although the occupational prestige levels are similar between the three groups at the lower levels, a somewhat greater proportion of the heads of households in the Basal Reading sample occupy more prestigious occupational positions.

A similar measure was employed to assess the occuptaional prestige level of the spouse. The results of this question were as follows:

Occupational Prestige Level of the Spouse

	Follow-Through Parents	Project Read Parents	Basal Reading Parents
Professional, technical (includes teachers)	0 (0%)	0 (0%)	0 (0%)
Business manager, official, proprietor	0 (0%)	0 (0%)	2 (7%)
Skilled, craftsman, foreman, kindred worker	2 (7%)	2 (8%)	1 (3%)
Semi-skilled, clerical, sales worker, teacher aide	4 (15%)	2 (8%)	1 (3%)
Unskilled, service, domestic worker	3 (11%)	6 (24%)	6 (21%)
Housewife	7 (26%)	5 (20%)	11 (34%)
Unemployed, relief, ADC	0 (0%)	1 (4%)	1 (3%)
No information	11 (41%)	9 (36%)	7 (24%)

As seen above, a considerably larger proportion of the mothers of Basal Reading pupils are likely to describe themselves as housewives. Very few from either sample stated that they were on relief or ADC; as indicated by the large proportion of "No information" responses, the team of graduate student interviewers appear to have been reluctant to probe into this area. Again, many of the respondents may have been reluctant to reveal such information about themselves.

In order to determine the familial composition of each household, an attempt was made to find out the parentage in each home. The interviewers obtained the following information:

Child Currently Lives With:	Follow-Through Parents	Project Read Parents	Basal Reading Parents
Original parents	17 (63%)	14 (56%)	23 (79%)
Mother and stepfather	1 (4%)	2 (8%)	0 (0%)
Father and stepmother	0 (0%)	0 (0%)	1 (3%)
Only mother	7 (26%)	5 (20%)	4 (14%)
Only father	0 (0%)	0 (0%)	0 (0%)
Guardian	1 (4%)	1 (4%)	1 (3%)
No information	1 (4%)	3 (12%)	0 (0%)

The above data corresponds to the information on families gathered from the student record files (see Part I - The Students) in that a higher degree of stability is reflected for the Basal Reading parents. The above figures, however, indicate that a considerably higher proportion of Follow-Through and Project Read students live with their original parents than was disclosed by perusing the school record files. This discrepancy may be due to one of several reasons: (1) the graduate student interviewers may have been reluctant to probe for further and more specific information in this sensitive area, or (2) the interviewers, who used a sampling with replacement method, may have obtained a sample which was biased in terms of residential and marital stability.

While the data obtained from the parental interviews may vary proportionately from the information gathered from the student record files, the trends are the same.

The Basal Reading parents tend to have better jobs, higher levels of education, greater family stability, and a lower incidence of working mothers than is so for the predominantly black parents of the Follow-Through and Project Read pupils.

Findings

A number of measures were employed to assess parental attitudes toward their children, the program that they attended, and toward the schools that they were enrolled in. A series of questions were designed to assess the feelings of parents about their children's schools, their knowledge of the program in which their children were enrolled, and their overt behavior in supporting the schools through their voting efforts (see Appendix C, Items #2, 15, 36-38). These questions are presented in abbreviated form in Table 4.24 along with the distribution of parental responses and θ values.

As may be seen by the frequency distribution and θ values in Table 4.24, there were no substantial differences between the three groups of parents in their attitudes toward their children's educational programs or the schools in which they were enrolled. The parents were unanimous in their feelings that (1) the school was helping their children to get ready for high school, (2) the reading programs provided for their children are providing an opportunity for academic achievement, and (3) they would like for their children to continue in their current reading program, regardless of which type. Such findings are, in fact, noteworthy, particularly in light of the considerable amount of discussion and writing which has been focused upon the alienation of black parents from the schools. It is also of interest to point out the lack of differences between black and white parents in their support of their schools through voting. The Follow-Through parents had a voting turn-out for the millage election which was equivalent to that of the white Basal Reading parents, indicating that the Follow-Through parents felt that their participation

TABLE 4.24

Parental Attitudes Toward Their Children's Program and Their Children's School

Item	Response: Yes	No	Not Sure or No Response	θ
School is helping child to get ready for high school				
Follow-Through Parents	21	3	3	
Project Read Parents	23	2	0	
Basal Reading Parents	28	1	0	.13
Do you know what your child is doing in his reading class right now?				
Follow-Through Parents	10	17	0	
Project Read Parents	13	12	0	
Basal Reading Parents	12	17	0	.10
Will child's reading program provide opportunity for academic achievement?				
Follow-Through Parents	26	1	0	
Project Read Parents	23	2	0	
Basal Reading Parents	22	7	0	.14
Would like child to continue in current school program				
Follow-Through Parents	26	1	0	
Project Read Parents	24	1	0	
Basal Reading Parents	25	4	0	.07
Did you vote in last school millage election?				
Follow-Through Parents	20	5	2	
Project Read Parents	12	11	2	
Basal Reading Parents	20	9	0	.16

was either necessary or potentially effective (although these parents were also personally encouraged by some of the principals). The Project Read parents, however, were less likely to give active support through their voting behavior.

Although more than half of all parents did not exactly know what their children were doing in their reading classes at the time that they were interviewed, the majority of them felt that they were at least fairly well informed about what and how

their children were doing in school. This question was directly presented to them (see Appendix C, Item #17); the distribution of responses and the θ value are presented in Table 4.25.

TABLE 4.25

Extent of Parental Surveillance of Children's School Performance

How well informed are you about what and how well your child is doing in school?	Follow-Through Parents	Project Read Parents	Basal Reading Parents
We are extremely well-informed	8	6	9
We are well-informed	13	9	4
We are fairly well-informed	6	4	9
We are only slightly informed	0	5	7
We know almost nothing	0	1	0

θ = .18

Although the Follow-Through parents appear to be able to maintain somewhat higher levels of surveillance over their children, the difference between the three parental samples is not great. When the responses given by the three groups of parents were compared, there were consistent differences in only 18% of the comparisons.

One manner in which parents can attempt to establish surveillance over their children's school behavior is by simply talking to them about their school work. Consequently, they were asked to indicate how often their children talked about the work that they did in school (see Appendix C, Item #3). The parental distribution of responses and the θ value are presented in Table 4.26.

As seen in Table 4.26, the large majority of all children discuss the work that they do in school very frequently with their parents. The difference among programs

TABLE 4.26

Extent to Which Children Discuss Work in Reading Programs and School Work

How often does your child talk about the work he does in school?	Follow-Through Parents	Project Read Parents	Basal Reading Parents
A lot	18	19	22
Sometimes	6	4	4
Seldom	0	1	3
Never	3	1	0

$\theta = .07$

is slight; when the responses given by the three groups of parents were compared, there were consistent differences in only 7% of the responses.

Since most children do discuss the work that they do with their parents, and since most parents feel that they are pretty well-informed about the work that is being done in school, they are also likely to have certain impressions about the level of difficulty of their children's work. Hence, they were asked to indicate their own and their children's feelings about the difficulty of the work which is required in school (see Appendix C, Items #4 and 5). In Table 4.27, these questions are presented along with the parental responses and the θ values.

TABLE 4.27

Parental Perceptions of the Level of Difficulty of Children's School Work

How does your child feel about the work he does at school?	Too easy	About Right	Too Hard	θ
Follow-Through Parents	6	13	8	
Project Read Parents	5	17	3	
Basal Reading Parents	7	14	8	.08
Do you feel that the work is:				
Follow-Through Parents	9	17	1	
Project Read Parents	3	18	4	
Basal Reading Parents	10	18	1	.19

As seen in Table 4.27, most Project Read parents perceive that their children feel that the work that they do in school is about right for them, and most of the parents are in agreement with their children. Follow-Through and Basal Reading parents are somewhat more likely to perceive that their children feel that their school work is too hard; the parents themselves, however, are not likely to agree with their children. When the three groups of parental perceptions of their children's attitudes toward school work were compared, there were consistent differences in only eight percent of the comparisons.

A considerably larger proportion of the Follow-Through and Basal Reading parents feel that their children's work is too easy than is so for the Project Read parents. When the answers of the three groups of parents were compared, there were consistent differences in 19% of the comparisons.

Since parental perceptions of the level of difficulty of their children's school work might be related to the extent of help that they give their children at home, the parents were asked to state how often they had helped their children do their school work at home during the past month (see Appendix C, Item #24). The parental responses and the θ value are presented in Table 4.28.

TABLE 4.28

Extent of Parental Involvement in Children's Home Work During Past Month

How often in the past month have you helped your child with his school work at home?	Follow-Through Parents	Project Read Parents	Basal Reading Parents
One or more times a week	4	14	9
Every two weeks	5	4	2
Once every month	3	1	3
Never	15	6	15

$\theta = .24$

As may be seen in Table 4.28, the Project Read parents help their children with their home work much more often than do the Follow-Through or the Basal Reading parents. This may be a function of parental perceptions of levels of difficulty of school work. As reported in Table 4.27, nearly one-third of both the Follow-Through and the Basal Reading parents felt that the work that their children did in school was too easy for them. Again, this particular finding might simply be related to the amount of homework that the teachers in the different programs assign to their pupils. Whatever the case, the Project Read parents are more likely to help their children with their work at home and they are also more likely to agree that the work that their children do is at about the right level of difficulty for them.

One reason that parents might help their children with their home work might be that of aiding them in getting better grades. With this in mind, the parents were asked to state how important that they thought it was for their children to get high ratings in school (see Appendix C, Item #8). The responses to this question and the θ value are presented in Table 4.29.

TABLE 4.29

Parental Perceptions of the Importance of Good Grades in School

How important is it to you for your child to get among the highest ratings in school?	Follow-Through Parents	Project Read Parents	Basal Reading Parents
Very important	13	15	9
Important	9	8	10
Not particularly important	5	2	10
Grades don't matter at all	0	0	0

θ = .25

As illustrated in Table 4.29, the Project Read parents do place more importance upon good grades than do the other parents. The Basal Reading parents assign

considerably less importance to good grades than do the other two groups. While more than one-third of the Basal Reading parents claim that high ratings in school are not particularly important, a slight majority of the Follow-Through and Project Read parents felt that such ratings are "very important". When the responses made by the three groups of parents were compared, there were consistent differences in 25% of the comparisons.

The parents were also asked to tell how they felt about their children's performance in school. (See Appendix C, Items #9 and 31.) The questionnaire items, the parental responses and the θ values for these items are presented in Table 4.30.

TABLE 4.30

Parental Perceptions of Their Children's Performance in School

Forget how the teacher evaluates your child's work. How do YOU feel about the work he does?	Follow-Through Parents	Project Read Parents	Basal Reading Parents	θ
His work is excellent	11	6	3	
His work is good	10	8	12	
His work is average	5	9	12	
His work is below average	1	1	2	
His work is much below average	0	1	0	.26
Do you think your child can do school work better, the same, or poorer than his friends?				
Poorer	0	2	0	
The same	12	13	21	
Better	13	10	8	
Don't know	2	0	0	.36

The Follow-Through parents are considerably more likely to favorably evaluate the quality of their children's work than are the other two groups of parents. They are more likely to feel that the work of their children is excellent, and they also feel that their children do better work than do their peers. The Basal Reading parents are

considerably more likely to state that their children do average work and, furthermore, their children do about the same kind of work that their friends do.

When the parental evaluations of their children's work were compared, there were consistent differences in 26% of the comparisons. When asked to compare the work of their own children with that of their friends, there were consistent differences in 36% of the comparisons.

Thus, there are important differences cropping up between the three groups of parents. Project Read parents are much more likely to help their children with their work at home because, apparently, they place a high emphasis upon good grades but feel that their children are not really excelling in school. The Follow-Through parents do not appear to help their children much at home; but, they place a high emphasis on good grades and, furthermore, believe that their children are doing quite excellent school work. Therefore, it is reasonable to assume that they feel that the school program is doing a very good job and that they, perhaps, should not interfere. Similarily, the Basal Reading parents do not help their children much at home, but they do not place a great amount of importance on high ratings at school and seem content that their children achieve average performance. Such findings are in accord with a number of related research findings which indicate the great value that black persons place upon schooling and learning as an avenue to success. Prior research also suggests that white parents are more likely than black parents to take education for granted.

In line with such reasoning, the three groups of parents were asked to state their expectations for the future educational achievement of their children (see Appendix C, Items #6 and 7). These questions, the parental responses and the θ values are presented in Table 4.3i.

The parents are nearly unanimous in their agreement that their children have more than an even chance to finish high school. When the responses given by the three groups of parents were compared, there were consistent differences in only 5% of the comparisons.

TABLE 4.31

Parental Expectations for Children's Future Educational Attainment

Do you think your child has a better than, or less than, a 50-50 chance of finishing high school?	Follow-Through Parents	Project Read Parents	Basal Reading Parents	θ
Better than 50-50 chance	26	23	29	
Less than 50-50 chance	1	2	0	.05
How far do you expect your child to go in school?				
Quit as soon as he can	0	0	0	
Continue in high school awhile	2	1	0	
Graduate from high school	4	10	12	
Secretarial, trade or business school	0	3	4	
Go to college awhile	2	2	4	
Graduate from college	14	7	7	
Go to graduate school	5	2	2	.23

When the parents were asked to indicate their expectations for the future educational achievement of their children, however, the Follow-Through parents had considerably higher expectations than did the other two groups of parents. The great majority of the Follow-Through parents expect that their children shall graduate from college. The modal response of the Basal Reading and Project Read parents, however, was that they expected that their children would terminate their education after graduating from high school; even the majority of these two groups of parents, however, felt that their children would go on and attain various types of formal education beyond high school. The Follow-Through parents clearly hold higher expectations for their children; when the responses of the three groups of parents were compared, there were consistent differences in 23% of the comparisons.

Several other questions were asked of the parents in order to assess whether the programs that their children were enrolled in might influence their views of teachers

and of the development of the children (see Appendix C, Items #10, 11, 12, and 18). These questions are presented in abbreviated form along with the distribution of the parental responses and the obtained θ values in Table 4.32.

TABLE 4.32

Parental Perceptions of Teacher Competency and Program Effects on Child Development

Is your child's teacher interested in how well he does in school?	Follow-Through Parents	Project Read Parents	Basal Reading Parents	θ
Yes, definitely	17	16	22	
Yes, probably	7	5	7	
Not sure either way	3	1	0	
Probably not	0	1	0	
Definitely not	0	2	0	.11
Do you think your child's teachers have a good knowledge of their subjects they teach in class?				
Yes, definitely	16	17	20	
Yes, probably	10	4	4	
Not sure	1	2	4	
Probably not	0	1	0	
Definitely not	0	1	2	.03
Does the school program allow your child enough freedom to pursue his own interests?				
Yes, definitely	18	13	17	
Yes, probably	7	9	7	
Not sure	0	1	2	
Probably not	0	0	1	
Definitely not	2	2	2	.09
How well do you think your child gets along with other children?				
Very well	18	13	13	
Fairly well	8	8	13	
Rather poorly	1	3	2	
Very poorly	1	1	1	.13

The majority of parents in all programs feel that the teachers are at least probably interested in how well their children do in school. When the responses were compared, there were consistent differences in only 11% of the answers given by the three groups of parents.

Again, the majority of all parents feel that the teachers probably have a good knowledge of the subjects that they teach in their classrooms. There were few differences among the three groups of parents on this issue: when the responses were compared, there were consistent differences in only 3% of the comparisons. Therefore, it might be said, on the basis of this analysis, that these inner city parents grant at least as much credibility to the teachers as do the parents of those children enrolled in a nearly all-white school.

The majority of all parents feel that the school program allows their children enough freedom to pursue their own interests. There were few differences among the three groups of parents in this respect: when the responses were compared, there were consistent differences in only 9% of the comparisons. Apparently, the parents of the Follow-Through children do NOT see that the highly structured aspect of this program has a negative influence upon their children. In fact, it appears as if they are even slightly more likely to feel that more freedom is accorded to their children than are even the parents of those pupils in the Basal Reading program.

Furthermore, the Follow-Through parents appear to feel that their children have made more progress in the area of social competence than is so for the other two groups of parents. A considerably higher proportion of them felt that their children get along "very well" with other children than is so for either the Project Read or the Basal Reading parents. When the responses given by the three groups of parents were compared, there were consistent differences in 13% of the comparisons.

Summary of Findings on Parents

A team of graduate students from the Western Michigan University Department of Sociology interviewed 27 parents of children enrolled in Project Follow-Through, 25 parents of Project Read pupils, and 29 who had children attending the Basal Reading Program. As compared to the latter group, the Follow-Through and Project Read parents were much more likely to be black, to have lower levels of education, lower occupational positions, and lower rates of the incidence in which both original parents were found in the home.

Most parents were generally satisfied with the programs that their children were enrolled in and, in fact, would like for their children to continue in their respective programs. Although most parents felt that they were at least fairly well informed about what and how well their children were doing in school, less than half of them were able to indicate what their children were doing in their reading classes. The majority of all parents, however, stated that their children talked a lot about the work that they did in school. Although a somewhat larger percentage of Follow-Through and Basal Reading parents said that their children felt that their school work was too hard for them, these parents did not tend to agree with their children. In fact, a considerable proportion of Follow-Through and Basal Reading parents reported that they felt that their children's work was too easy for them. Project Read parents, on the other hand, were considerably more likely to report that both they and their children felt that the level of difficulty of the school work was quite appropriate.

It was found that the Project Read parents are much more likely to help their children with their work at home than were the other two groups of parents. While the Follow-Through parents were similar to the Basal Reading parents in not helping their children very much, it appears as if they refrain from such help for quite different reasons. These are as follows:

1. Both Follow-Through and Project Read parents assign more importance to high ratings in school than do the Basal Reading parents,

2. Follow-Through parents are considerably more likely to feel that their children are doing excellent work in school than are either the Project Read or Basal Reading parents,

3. Follow-Through parents are more likely to feel that their children are doing better school work than are their peers,

... so, it may well be that the Follow-Through parents feel that they may only be interfering with their children's progress if they attempt to help at home. On the other hand, the Project Read parents, who also place a high emphasis on good grades at school, seem to feel that their children are not doing quite as well. Consequently, this may be the reason that they do more work with their children in the home. These findings indicate the greater emphasis that black parents are likely to place on the value of education for their children. The white parents of the Basal Reading pupils appear to assign considerably less importance to the notion of getting good grades and, as such, seem to be content with average achievement on behalf of their children. Although all parents believe that their children have a pretty good chance of finishing high school, there are considerable variations between the three groups of parents regarding how much further their children shall go in the academic arena. A large majority of Follow-Through parents expect that their children shall become college graduates; most Basal Reading and Project Read parents do not expect their children to go quite that far (perhaps just a few semesters in college).

The above findings represent the greatest differences between the three groups of parents. There are some reported attitudinal similarities between the black and white parents, however, that are also noteworthy.

Nearly all parents felt that the teachers of their children were generally competent and interested in their children's progress. This suggests that the reputed estrangement of many inner city black parents from the schools does not exist in this situation. Nearly all parents felt that their children were generally allowed enough

freedom in their school program to pursue their own interests: the parents of the Follow-Through pupils were even more likely to state that their children were afforded such freedom than were the parents of students enrolled in the generally more flexible Basal Reading program.

Parental perceptions of the social competency of their children tended to weigh favorably for the Follow-Through parents; they were considerably more likely to state that their children got along "very well" with other children than were the other two groups of parents.

In summary, it may be said that to the extent that some of the objectives of the Follow-Through program may be those of (1) reducing parental estrangement from the school, (2) enhancing parental expectations of their children's achievement and ability, and (3) encouraging parental support of their children's school behavior, Project Follow-Through has been a success at the fourth year level.

PART IV - THE PRINCIPALS

The principals of all seven schools in which students were sampled participated in a one hour, informal, taped interview with the investigators. Since only a very small sample could be obtained, there is little justification for a systematic statistical analysis. On the other hand, many of the observations and opinions expressed by the principals are of great value for the understanding of the operation of the three respective programs as well as for interpretting the results of this study. This was particularly true for the investigators; it is to be hoped that this will be the case for the reader.

One of the first problems that we, as investigators, encountered was that of clarifying our role to the principals. The implementation of a number of experimental programs in the school system has been accompanied by a plethora of other "outside experts" and personnel, many of whom have a vested interest in the operation of various programs. This fact, in and of itself, probably caused many of the principals to exercise caution and restraint in responding to the deluge of questions cast upon them by two, and sometimes three, aggressive young men carrying a tape recorder. Again, the investigation called for us to ask the principals to enumerate various perceived contributions and weaknesses of three different programs, an enterprise which almost coerces the principal into making invidious distinctions. It may have been quite difficult for all of the principals to comfortably accept us as impartial observers; this is indicated by the fact that two principals refused to have their interviews taped. Again, one principal who appeared to have been unsettled by so many questions stated that he had tried to defend each program in his school "equally and to be objective."

Some of the principals were quite outspoken in their advocacy of one program over another - but there was no consistent trend among the principals involved. Some would

like to see the Follow-Through program implemented throughout their entire school building; others preferred Project Read. No matter the preference, however, all of the principals would like to see at least some modifications in their favored program prior to complete implementation.

In beginning the interview, each principal was asked to attempt to compare and contrast those compensatory educational programs which were familiar to him. Most of the principals had more than one type of compensatory program within their building and were thus able to stipulate a number of basic differences. In other words, a principal who supervised a Follow-Through program, a Project Read program and a Basal Reading program was very likely to be closely acquainted with the different philosophical assumptions, the variations in instructional procedures and, furthermore, could make some assessment about program effects upon teachers, students and parents. Some of the individual observations may be instructive. One principal who openly advocated the Follow-Through program made the following comments:

> "The basic assumptions of Follow-Through are different. Starting with Phase I (kindergarten) it is assumed that children can remain in school all day rather than just a half day. Second, it is assumed that the kids are ready to learn NOW. They have thrown away the idea that a kid "unfolds"; it is assumed that they CAN perform academic tasks.
>
> Other programs want children to learn to socialize. This is erroneous because these children live in homes where they have to cross the streets to go to the store, they have to stay home and baby-sit and clean the house, etc. This is a faulty assumption. The assumptions of Follow-Through indicate the academic approach: the kids ARE ready and they CAN learn."

Another principal who tended to favor Project Read stated:

> "Project Read gives disadvantaged kids the opportunity to gain more self confidence. Before these kids get involved in school, they have experiences which deviate from middle class norms and they get turned off by school. Project Read given them what no other program does."

Another, in discussing some of the Basal Reading materials, asserted:

> "Scott-Foresman, in responding to pressure, has done a thorough job of research. They have shifted the emphasis to urban problems and given twists to reading which have more to do with language. They concluded that all of the country was not rural or suburban. In their materials, they give suggestions; they are not didactic."

During the interviews, nearly all of the principals made their first distinctions in terms of structure (i.e., flexibility versus rigidity in the use of reading materials, teacher presentation, program supervision and testing procedures). The whole notion of "structure", which constitutes one of the major differences in the three different programs, evoked a variety of reactions from the principals. As one principal stated about the Follow-Through program, "Its strongest point is also its weakness."

Few principals seemed to feel that the highly structured nature of the Follow-Through program had a negative impact on children: the majority felt that this was generally beneficial for the pupils. To a certain extent, however, it almost seemed as if the perceived impact upon TEACHERS was crucial in obtaining the principals' support for the Follow-Through program.

One principal, who leaned toward the Distar Follow-Through program, made the following comment about the intensive supervision of the Follow-Through program as compared with the Basal Reading program which operated in his school:

> "In Follow-Through, the supervisors come on a regular basis and review what is going on. I like the continuous testing of the children, for it keeps the teachers on their toes.
>
> In regular education, there are days when you sluff off and days when you hit it hard. In that kind of classroom, only you and God know what you are doing there. As a principal, there is no way that you can put your thumb on these teachers to see what they are doing like in Follow-Through."

A second principal agreed with this aspect of the Follow-Through program, but added the fact that one of the outcomes of such intensive supervision was that of rigidity:

> "Follow-Through ensures that the teachers impart at least a minimal amount of effort and skill. That is good.
>
> But the teachers become rigid. They say,'I HAVE to get it done NOW. What if there is a fire drill? I am getting BEHIND!' The pressure is on. The teachers get frustrated. We cannot hold meetings or in-service programs in the mornings without giving the teachers ample notice."

This particular principal, however, saw the Project Read teachers operating on a similar basis. For him, the prospects of interrupting the teachers' morning

schedule would be nearly catastrophic; but he can "get away with nearly anything in the afternoon."

Another indicated that there could be problems with the intensive supervision of the Follow-Through program:

> "Some of the supervisors who deal directly with the teachers are over-zealous and too persistent. The inexperienced teachers see them as being too dogmatic and begin to develop less positive attitudes. If the test scores are down, the supervisors put the pressure on the teachers without finding out the reasons why the scores are down."

In addition to the structural differences in supervision, the principals also noted variations in the amount of structure imposed on structional techniques in the classroom setting. When referring to pupils, most of the principals seemed to agree with the notion that the more structured Follow-Through approach provides more positive kinds of feed-back:

> "Follow-Through gives an immediate payoff. The teachers don't talk down to the kids; they reward positive things."

> "Even the Phase I (kindergarten) children are more socially mature. I go to their rooms and I am impressed with their competence and confidence. This comes about through the structure of the program and with its emphasis on positive reinforcement."

> "Follow-Through and Project Read are both highly skilled programs, but Follow-Through lends to checking on the spot. Both programs try to do the same thing, but with Project Read there is a span between the times when you check for success. Follow-Through is here and now along with reinforcement."

> "Follow-Through gives the opportunity for more reinforcement in the basic reading skills, etc., due to the larger number of permanent employees. Project Read could do the same thing if there were funds for para-professionals."

> "The Follow-Through kids develop a good self-concept. They can say, 'I KNOW I'm good.'"

> "The strength of Follow-Through may also be its weakness. It may be too structured. The kids may be brow-beaten. I know that this is contradictory, but I would like to see more room for creativity."

For the most part, the principals agreed that the highly structured aspect of the Follow-Through program did not noticeably impair the children academically nor socially. None reported any disproportionate share of behavioral or disciplinary

problems which might be contributed by the Follow-Through classrooms. One principal claimed that a couple of "emotionally disturbed" children had experienced some difficulties with the Distar classroom setting; but another claimed that he had to deal with a larger proportion of discipline problems from the Basal Reading program than was so of the Follow-Through children. Again, most of the principals seemed to agree that the Follow-Through program did accomplish those goals which had been formally established; but the same thing was generally true for Project Read.

The structured aspects of the Follow-Through instructional techniques, however, were seen as having a much more varied impact upon teachers:

> "The teachers can't stay in Follow-Through unless they are energetic; a lot of input is needed for inexperienced teachers. They are more frustrated in Follow-Through, for everything has to be done just so. They become more compulsive and uptight."
>
> "The Follow-Through teachers are highly pleased with the progress of their children. They bring little kids to me and say, 'Just listen to him read.'"
>
> "The Project Read teachers are happy when they see kids develop skills that they did not have, when they can attack words systematically. The teachers in the regular porgram get uptight when we start testing, for they don't feel that their pupils are geared for tests. The Follow-Through teachers are more confident, for their program makes the kids test-wary."
>
> "Follow-Through teachers need extra training. This kind of a teacher needs to be a different breed of cat with a high powered program. There is a high noise level; she needs a high frustration level and tolerance for noise. A high strung, hyperactive person probably won't make it. She also needs endurance, for Follow-Through is much more demanding."
>
> "There are some dangers in Follow-Through: it needs some supplementary things. It tends to fixate urban kids with a limited number of concepts: here they are, learn them. We forget that may kinds learn first through vision; an auditory source of learning is a secondary source.
> Teachers come to feel that the only thing that kids learn is what they teach them. That is malarky. They learn other things through sight and we must admit this. We need visual things that kids can draw in, too.
> The weakness of any prescription lays with the personality. Follow-Through places an emphasis upon the idea that it is the teachers' responsibility for the child to learn. But it depends on the personality of the teacher - the in-service programs and other things help.
> In Project Read, they say, 'If you give a kids a certain amount of material and he has done something with his skills, we guarantee he'll learn so much.' But Sullivan can't be off in Timbuctoo and guarantee anything that happens here for sure. Follow-Through has its people right here."

"We use the Scott-Foresman and MacMillan developmental programs in our school (Basal Reading). Let the teachers be free; let her do what she wants and she will do a better job."

It is difficult to derive any final interpretation from the diverse statements of such a small sample. It does appear, however, as if there may be various kinds of an orientation which might be associated with a principal's support of one program over another. It is the studied opinion of the authors (and ONLY that) that some principals who favored the Follow-Through approach empathize predominantly with children and not with teachers. Some principals who seemed to be more concerned with the welfare of their teachers appeared to take a more favorable view of Project Read. One principal who supervised only the Basal Reading program and lacked the familiarity with other programs necessary for making a comparative assessment was quite satisfied with this particular approach.

There are, of course, several different reasons which might lead principals to become more greatly concerned with the welfare of teachers rather than that of students. Some of these reasons became quickly apparent during the course of the interviews:

1. Having been teachers at one time, some of the principals may naturally tend to empathize with teachers.

2. Some of the principals, having recently been appointed to their positions, were still working to attain the faith and trust of the teachers.

3. Some of the principals, upon accepting their new positions, found that the teachers were divided against themselves on a number of dimensions - the primary task became that of conflict resolution and the amelioration of certain social conditions.

4. The task of retaining good teachers in an inner city setting can be quite difficult in and of itself.

For these and other reasons, then, some principals could easily become quite apprehensive about applying even more pressure to the teacher. Again, for these kinds of reasons, some principals appeared to be struggling to bring the teachers together. This was most quickly apparent when they were asked questions about how

much the teachers of one program know about other programs and about the extent of diffusion of various elements and concepts from one program to another. The following statements may be illustrative:

> "There had been a lot of conflict here before I came, and there were limited communications between the teachers. I changed it to 'one staff working cooperatively' and held in-service programs to bring them together. Project Read teachers gave demonstrations of concepts and objectives for each grade level. The Follow-Through teachers asked questions, and three Follow-Through teachers later asked to be transferred to Project Read."

> "I see some carry over from one program to another. The kindergarten program is borrowing from Head Start and Bereiter-Engelmann. Project Read has a way of working on sounds that other teachers are picking up."

> "Teachers do not know too much about what the teachers in other programs are doing. Follow-Through gives some in-service training to those in other programs. I am trying to develop unity; this is hard with 57 people. I have tried to play down the status that may be associated with teaching in the different programs with the result that most teachers do feel good about their own programs."

> "Project Read has had no effect on Follow-Through that I can see; Follow-Through is too boom, boom, boom. But Follow-Through has had some effect on Project Read, especially on the teachers' thinking. For example, the idea that kids should be tested every so often; they think that some Follow-Through things are good."

> "There were some unhealthy feelings between the teachers. A staff needs to feel dignity about what they do. Young teachers who have just left college have often had little work in word attack skills - they were glad to get this when Project Read was implemented. The teachers now go around and look in each others' rooms and borrow ideas and adapt things."

Nearly all of the principals stressed the fact that they had tried to get the teachers to function as a cooperative team, a team of equals. Some of the principals indicated that there may have been some initial difficulties in this:

> "The Follow-Through classrooms are self-contained: the bathrooms, the water fountains in the classroom so that the kids never have to leave the room like in the other classrooms. Again, they had lunches and snacks before the other kids had them. Furthermore, Follow-Through had funds for teacher aides and for PAC (Parental Advisory Council) that the other programs did not have."

Many of the principals stated that they took several precautionary steps at the beginning of the year to obliterate status differentials and thus promote harmony among the teachers. While this is necessary and essential for school administration,

it constructs an almost inestimable obstacle for program evaluation. More specifically, there is little reason to believe that many of the teachers have remained "program purists" in their approach. Indeed, some of the teachers in the other two compensatory programs have begun to use Distar reading materials as well as some of the teaching approaches. What this means, then, is that there may be as many variations within each respective program (with, perhaps, the exception of Follow-Through) as there are between the programs. Noting the use of para-professionals in the Follow-Through program, for example, some of the teachers in other programs have begun to use them as "teaching aides" rather than as "teacher aides"; that is, they have begun to assign certain teaching tasks to the para-professionals rather than mere menial tasks.

In the interviewing situation, the principals were particularly helpful when they were asked to indicate the greatest strengths and the weaknesses of each particular program. These are presented in the following tables.

TABLE 4.33

Principals' Perceptions of Follow-Through: Its Strengths and Weaknesses

Follow-Through is Strong	But	Follow-Through is Weak
Develops self-concept; they can say, "I KNOW I'm good." Continual reinforcement and drilling helps to learn and remember things ...	But	Structure may cause kid to be browbeaten. Would like to see more room for creativity.
Good team work in the classroom ...	But	Could get the same results with Project Read if we had the funds. Supervisors of teachers should be more considerate and less dogmatic.
Language development. Rewards positive things. Accountability of teachers ensure that they put in a minimum amount of effort. Three persons in classroom work in a skilled way. The fact that they believe in what they are doing, and the parental trust are fine things ...	But	Needs structure in the afternoon to relieve teacher frustration. Accountability can create teacher rigidity. Three female adults in a classroom can create problems. Does not pay attention to visual aspects of learning.

IABLE 4.33 (Con't.)

Follow-Through is Strong	But	Follow-Through is Weak
It has proved to other teachers that these kids can learn; others see them achieve. It has given parents faith in the schools; they voted for the millage like never before ...	But	It does not permit teachers to get involved in being creative, for everything is right there. She does not have to do homework or give much beyond the job (but this may not be necessary).
The attitudes of the children toward the school ...	But	If teacher and aides are all absent, what does one substitute teacher do with four groups of kids?
Is easy to use substitute teachers, for the aides can show her what to do and help in teaching ...	But	It is hard to evaluate the teachers since everything is pre-planned for them. Have to ask the teacher supervisors for help in evaluation.

TABLE 4.34

Principals' Perceptions of Project Read: Its Strengths and Weaknesses

Project Read is Strong	But	Project Read is Weak
Emphasis on word attack skills; personnel believe in what they are doing ...	But	Hard to interpret to parents why kids should work with three letter words. Should do things with small words. Don't like the idea that they "suggest" one should do this or that; it should be "This HAS to be done."
For the amount of money in it, there is no comparison. Does not call for all of the personnel that Follow-Through does. Like the approach, for there is little to prove any correlation between the size of a group and how much kids learn ...	But	Teachers feel better talking to a small group. It needs more for teacher accountability.
Children develop phonetic skills. Teachers are happy to see kids develop new skills ...	But	Does not permit kids to develop a broad enough vocabulary. Should be more extensive vocabulary like Follow-Through.
The attitude of the children toward the school ...	But	Sometimes hard to fit in substitute teachers.

TABLE 4.34 (Con't.)

Project Read is Strong	But	Project Read is Weak
Gives the child a feeling of self-worth without being embarrassed in front of peers when he makes mistakes ...	But	If present standardized tests continue, Project Read should be geared toward helping kids adjust to various tests, or provide a test designed to bring about same objectives under consideration
Is easy to use substitue teachers, for each child has his own book and knows what he is supposed to be doing that day ...	But	There is often a time span between learning and testing.

TABLE 4.35

Principals' Perceptions of the Basal Reading Program: Its Strengths and Weaknesses

Basal Reading is Strong	But	Basal Reading is Weak
Kids still have the freedom to express themselves and to be creative - this is important ...	But	Have no way to systematically monitor which kids are learning or not learning so that we can zero in. Also, there are no pre-assessment tools to tell us where to zero in and tell us if the kids know certain basic things.
Less structured; gives more creativity ...	But	Leaves kids hanging. They are told that they give wrong answers and that is all. Teachers may sluff off on one day and hit it hard the next; principals can't see what they are doing.
Gives kids more freedom, a chance to be creative and to be himself. This is important, for they need to be sure of themselves ...	But	Lack of structure. Would like an integrated program. Would like a Sullivan person to come in and tell teachers where they fail and what to do.
As children progress, it shows that someone has taken the time to develop them according to their age and maturity. Basal Reading = teacher's plans + test + what the child needs ...	But	May not reach every child, but teachers can supplement that. Basal Reader is only a "base" for the teacher.
Attitudes of children toward school, is a result of the attitudes of the people toward the children ...	But	Substitution of teachers is sometimes difficult.

TABLE 4.35 (Con't.)

Basal Reading is Strong	But	Basal Reading is Weak
Scott-Foresman have done a lot of good research. It is very thorough.	But	The readers "suggest" what you "should" do with certain problems. Should make statements that you MUST do certain things a certain number of times.

For each program, the principals could see nearly as many weaknesses as they did strengths. As a group, it can not be said that the principals were decisively convinced that any one program was outstandingly better than any other; few, however, would seem inclined towards adopting the Basal Reading Program.

Some of the principals indicated that they would like to see a "blended" kind of program, integrating some of the better elements of Follow-Through and Project Read. One suggested that Project Read might be a good program for those children who had completed the Follow-Through program. Another expressed his concern about the large number of diverse experimental educational programs operating within the total school system. Although he was opposed to the development of any single "mold", he acknowledged the fact that many inner city families are highly mobile and the children may have certain difficulties in being continually transferred from one school building - and from one experimental program - to another.

One principal, when asked which kind of program he would rather have implemented throughout his entire school, could not be specific. He did, on the other hand, specify a list of criteria which any program would have to meet before he could give it his total support:

1. The program should have total parental trust and support.
2. The program must be something teachers can live with and have the expertise to handle.
3. The program must relate to language development.
4. The program must have pre-service, in-service and post-service training.

5. There must be a way to keep a constant check on the curriculum.

6. There must be a bibliography which supports its origins and objectives

The principal then left it up to the authors to try to guess which program most closely approximated this particular model.

Since such a small sample was available, it is quite difficult to draw any definitive conclusions. Some attempt, however, no matter how tentative, must be made. These are as follows:

1. There is a great deal of variation in which the principals supervise the early elementary experimental programs. A few appear to devote more of their time to Project Read and Basal Reading and let the supervisors of the Follow-Through program take care of that area (given that there are several programs operating in the same building). Others attempt to distribute their time equally among different programs. The latter approach seems to be associated with a considerable amount of the diffusion of certain concepts and practices from one program to another, thereby creating difficulties in attempts to evaluate the effects of one kind of program as compared to another.

2. There appears to be little difference in the kinds of pupil discipline problems which might be attributed to one kind of program as compared with any other.

3. There appears to be little difference in the principals' perceptions about which kind of elementary program creates greater enthusiasm. Some indicated that the Follow-Through teachers were more enthusiastic, but they tempered such statements with the observation that most of the Follow-Through teachers were new, as compared with the other teachers, and were more likely to be enthusiastic because of this fact. As one principal put it, "The more experienced teachers are more used to the day-to-day events and don't come to me so often."

4. There were no consistent reports about which kind of program might be associated with greater teacher satisfaction. Absenteeism, a possible indicator of dissatisfaction, did not appear to be associated with type of program:

> "If teachers work hard, they do have a higher absenteeism rate, for they are drained. They drive themselves hard in this school. The Follow-Through teachers' absenteeism corresponds to the rest of the teachers; I haven't noticed any difference."
>
> "My staff is pretty dedicated. If they are absent, they are really ill. There is little difference between the programs."

5. In the event that a teacher is absent, the principals see little difference in providing continuity with the use of a substitute in the programs. In Project Read, each child has his own book and persues an individual course

of action: thus, each child knows what he is to do each day. In Follow-Through, the two teaching aides are quite adept in helping the substitute teachers (who are also trained in the Distar approach).

6. As has been previously indicated, there are reasons to suspect that if a principal expresses high concern about the welfare of his teachers, he may be somewhat more likely to give his support to Project Read. On the other hand, those principals who express more concern about the welfare of the pupils seem more likely to embrace the concept of Follow-Through.

RELATED STUDIES

CLASS, RACE, AND THE VALUE OF EDUCATION

John A. Vonk
Alan McEvoy
Clifford Bryan

This research report presents findings on selected social characteristics associated with the value that parents of elementary school children place upon education. The values that parents may attach to their child's education are quite diverse. Some parents value an education for their child in order to enhance social competence, i.e., the ability to get along with people. Others may value education for reasons of personality development, e.g., self actualization. Still other parents hold idealistic values, valuing education for its own sake (knowledge qua knowledge). Finally, there are those parents who are more pragmatic and see education as a means of getting a better job. These differing values for education are the subject of this investigation. The primary concern of this project is to determine if the value placed upon education is a variant of selected socio-cultural experiences or of racial identity. The major social system variables investigated are occupational prestige levels, level of educational attainment and parental racial identity.

The general population for this study includes all parents of second grade level inner city pupils in a midwestern metropolitan city of approximately 200,000 people. The sample selected for the larger project from which this study is derived consisted of 153 pupils in the Distar Follow-Through program, 53 in Project Read, and 80 in the Basal Reading program. For this specific study, the names of 90 parents were randomly selected (30 from each program). A total of 81 parental interviews were completed.

The basic measure for assessing the value parents place upon education was that of asking parents to state what they thought was the most important thing for their child to get out of school. Almost one-half (44%) stated that education was most

important for their child in getting a better job; 24% felt that education was important in helping their children learn to get along with others; and 21% of the parents valued education primarily for the sake of education. The remainder (10%) valued education for reasons of personality development or self-actualization.

Since there are those who would contend that black parents are more likely to value education for pragmatic reasons (better jobs, upper mobility, etc.), racial identification was one of the first considerations. As indicated in Table 1, 57% of the black parents held a pragmatic value for education as opposed to only 29% of the whites. Such results indicate that black parents are more likely to see education as a major mode of economic advancement than are whites.

Table 1

Values for Children's Education:
White and Non-White Parents

	White		Non-White	
Pragmatic Value of Educ.	9	29%	24	57%
Other Values of Educ.	22	71%	18	43%
	31		42	

73

There are, however, many who would contend that apparent racial differences are actually the result of differential socio-cultural experiences. Thus, this finding raises the question of whether the obtained differences can also be accounted for by certain socio-economic indices. Accordingly, as portrayed in Table 2, the relationship between parental levels of educational attainment and educational values was also ascertained. The results indicated that, with no controls, higher parental levels of educational attainment were related to the type of value attached to education.

Table 2

Values for Children's Education By
Attainment Level of Parents

	Less Than High School		High School or More		
Pragmatic Value of Educ.	17	51.5%	14	36.8%	
Other Values of Educ.	16	48.5%	24	63.2%	
	33		38		71

A second SES indicator, occupational prestige level, was also examined. As shown in Table 3, once again, with no controls, there was only an association at the upper occupational prestige levels.

Table 3

Values for Children's Education By
Occupational Prestige Level of Parents

	Low		High		
Pragmatic Value of Educ.	24	51.1%	10	31.2%	
Other Values of Educ.	23	48.9%	22	68.8%	
	47		32		79

One might conclude from this that not only are blacks more likely to value the instrumental purposes of schooling but also higher level SES parents, both white and non-white, are more likely to attach other non-instrumental values to education.

When using occupational prestige levels as a control variable, the strongest differences occur both among non-white in the lower occupational categories and among whites in the higher occupational levels (see Table 4). Apparently, the occupational prestige level of the parent is an important condition which influences the association between race and the value attached to their children's education.

Table 4

Parental Values for Children's Education:
Racial and Occupational Differences

	Low Occupation				High Occupation			
	White		Non-White		White		Non-White	
Pragmatic Value of Educ.	5	41.7%	17	60.7%	4	21.0%	6	46.2%
Other Values of Educ.	7	58.3%	11	39.3%	15	79.0%	7	53.8%
	12		28		19		13	
	40				32			

When using higher and lower education levels as a condition under which to assess the association between whites and blacks and the values they attach to education, these same differences occur among those with low and high levels of educational attainment. In Table 5, it is of interest to note that better educated non-whites are only slightly more likely to value education for its utilitarian purpose than they are for idealist or other reasons. Irrespective of educational level, non-whites are slightly more likely to value education for its instrumental value than are whites.

Table 5

Parental Values for Children's Education:
Racial and Educational Attainment Level Differences

	Low Educational Attainment				High Educational Attainment			
	White		Non-White		White		Non-White	
Pragmatic Value of Educ.	6	46.2%	10	58.8%	2	12.5%	11	55%
Other Values of Educ.	7	53.8%	7	41.2%	14	87.5%	9	45%
	13		17		16		20	
	30				36			

On the other hand, whites, regardless of occupational prestige level or educational attainment, are somewhat more likely to attach non-utilitarian values to the education of their children. Of the non-whites who do attach other values to education, a slightly higher proportion of them are characterized by higher occupational prestige levels or higher educational attainment levels.

Table 6 illustrates the percentage of parents who have non-instrumental values for their children's education according to occupational prestige level and racial identity. White parents are more likely to value education for non-instrumental reasons, however, it is readily apparent that educational values are associated with occupational prestige levels. The educational values of white parents are much more affected by occupational position than is the case for blacks: the difference between occupational levels for whites is 21% whereas only a difference of 16% exists among non-whites. The level of occupation is affecting white parents more than non-white parents but it affects both groups in the same manner.

Table 6

Percent of Other Values Attached to Education
by Race and Occupation

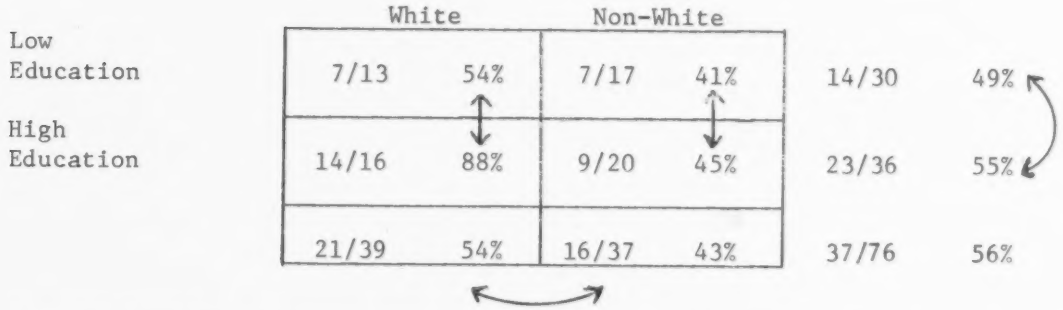
	White		Non-White			
Low Occupation	7/12	58%	11/29	38%	18/41	44%
High Occupation	15/19	79%	7/13	54%	22/32	69%
	22/31	71%	18/42	43%	40/73	73%

In assessing the differences which are associated with educational background, it appears that white parents' educational values vary considerably more than is the case for non-whites (see Table 7). There is a difference of 34% between whites with high and low levels of education who hold non-instrumental values; between non-whites, this difference is reduced to only 4%. Restated, valuing education for its non-utilitarian purposes is much more dramatically influenced by the level of educational attainment among

white parents, than it is for non-whites. Seemingly, the educational background of black parents has little influence on the values they place on education.

Table 7

Percent of Other Values Attached to Education
by Race and Education



A final concern revolves around the different kinds of early elementary educational programs that the parents' children are enrolled in. The variations in educational values as associated with the type of reading program are depicted in Table 8.

Table 8

Parental Values for Children's Education
and Child's Reading Program

Educational Values	Early Educational Program		
	Follow-Through	Project Read	Basal Reading
Idealistic	5 (19%)	3 (12%)	9 (31%)
Economic	12 (44%)	13 (52%)	10 (35%)
Personal	1 (4%)	2 (8%)	6 (21%)
Social Adjustment	8 (30%)	7 (28%)	4 (14%)

A considerably higher proportion of the Basal Reading parents (31%) are likely to place an idealistic value upon their children's education than is so for the other two groups of parents (19% and 12%). The Basal Reading parents, in previous analysis, were found to be predominantly white, and were characterized by slightly higher levels of education and occupational prestige. A majority of Follow-Through

and Project Read parents attached an economic value to the education of their children. A considerably larger proportion of the Basal Reading parents placed a personal value on education than did the other two non-white groups; and a slightly higher proportion of the Follow-Through and Project Read parents emphasized the importance of social adjustment in the schooling of their children.

In summary, it appears that race is an important variable for determining the values that parents place upon their children's education. However, when controlling for occupational prestige, the relationship between racial identity and educational values is considerably reduced, indicating that the occupational prestige level of parents is an important condition affecting the value they place on education. Both highly educated black parents and white parents attach an idealistic value to education, but black parents are still more likely to value education for its utilitarian purposes. These differences do not occur among black and white parents with lower levels of education. This suggests that the values that white parents hold are likely to be affected by their own educational background. Black parental values, however, do not appear to be similarly modified by their own educational attainment.

PARENTAL TUTORING AS A FUNCTION OF PERCEIVED PROGRAM EFFECTS AND PUPIL PERFORMANCE

Alan McEvoy

Currently in the field of education, there is a growing interest in parental teaching roles in the home. Both social scientists and educators alike are interested in the possible effects that home tutoring might have on a child's achievement. Of special interest are many social and social psychological characteristics which may or may not increase the likelihood that tutoring in the home will occur. It is the purpose of this study to examine selected social and social psychological characteristics (i.e., education, occupation, race, perceived value of education, perceived ability of child) which may be associated with parental teaching roles in the home.

The general population for this study are the parents of second grade level inner city students in a mid-western metropolitan city of nearly 200,000 people. The randomly selected sample, stratified by type of elementary program, consisted of 90 pupils who were in three different programs; Distar Follow-Through (N = 30), Project Read (N = 30), and Basal Reading (N = 30).

It was found through the parent interviews that thirty-four percent of the parents helped their child at least once per week; 14% indicated once every two weeks; 9% said once every month; and the remaining 44% of the parents claimed that they never helped their child with his school work at home. These categories were dichotomized into two groups: high degree of tutoring (at least once every two weeks or more), and low degree of tutoring (only once per month or never).

Our analyses then proceeded with the question of whether the educational level of the parents influenced the extent to which they helped their children with homework. We were able to find certain discernable differences in home tutoring between parents of low and high educational attainments.

When controlling for education, it was found that highly educated black parents are more likely to help their child with his school work than are highly educated white parents. No significant differences between black and white parents of low educational levels were evident.

When controlling for occupation, a similar phenomenon occurs. Among low occupational levels, white parents are less likely to offer assistance to their child than are black parents. On the other hand, no differences between black and white parents are visible at the higher occupational levels.

The parents were also asked to state what they thought was the most important thing for their child to get out of school. Responses were divided into two categories: pragmatic value of education as opposed to other values. The results indicate that there is a slight relationship between the value parents place on their child's education and the degree of tutoring given the child. Fifty-four percent of the parents who indicated having a pragmatic value of education also engaged frequently in home tutoring activities. Only 41% of those parents who responded in a non-pragmatic sense frequently aided their child with his school work. We also asked the parents if they thought their child could do school work better, the same, or poorer than his friends. Responses were dichotomized into two groups; parents who perceived their child as doing school work better than others and parents who thought that their child could only do school work the same or poorer than others. Fifty-five percent of the parents who perceived their child's ability as being the same or poorer than his friends frequently assisted him with his school work at home. Antithethically, only 36% of the parents who perceived their child's ability as being better than others frequently helped him with his school work. This lends credence to the contention that the higher the parental perceptions of their child's ability, the less likely they are to engage in home tutoring activities.

In summary, this study investigated certain social and social psychological characteristics associated with extent of parental assistance with school work in the home. It was concluded that both the value parents place on the education of their child and their perceptions of their child's ability affected whether they would aid their child. The more able the student was perceived to be the less the student was helped.

Table 1

Education of Parents As It Relates to Degree of Home Tutoring

		Education of Parents L	Education of Parents H
Degree of Tutoring	L	59% 19	53% 20
	H	41% 13	47% 18

Table 2

Occupation of Parents As It Relates to Degree of Home Tutoring

		Occupation of Parents L	Occupation of Parents H
Degree of Tutoring	L	52% 25	55% 17
	H	48% 23	45% 14

Table 3

Race of Parents As It Relates to
Degree of Home Tutoring

Degree of Tutoring		Race: Black	Race: White
	L	48% (20)	63% (19)
	H	52% (22)	37% (11)

Table 4

Relationship Between Highly Educated Black and White Parents
and the Degree of Home Tutoring

Degree of Tutoring		High Education: Black	High Education: White
	L	40% (8)	69% (11)
	H	60% (12)	31% (5)

Table 5

Relationship Between Black and White Parents of
Low Education and Degree of Home Tutoring

Degree of Tutoring		Low Education: Black	Low Education: White
	L	59% (10)	50% (6)
	H	41% (7)	50% (6)

Table 6

Relationship Between Black and White Parents from Low Occupations and the Degree of Home Tutoring

		Low Occupation	
		Black	White
Degree of Tutoring	L	41% (12)	83% (10)
	H	59% (17)	17% (2)

Table 7

Relationship Between Black and White Parents from High Occupational Prestige Levels and the Degree of Home Tutoring

		High Occupation	
		Black	White
Degree of Tutoring	L	62% (8)	50% (9)
	H	38% (5)	50% (9)

Table 8

Relationship Between Parental Perceptions of the Value of An Education for Their Child and the Degree of Home Tutoring

		Value of an Education	
		Pragmatic Value	Other Values
Degree of Tutoring	L	46% (16)	59% (26)
	H	54% (19)	41% (18)

Table 9

Parental Perceptions of Their Child's Ability As It Relates to the Degree of Home Tutoring

Degree of Tutoring	Perceptions of Ability: Low	Perceptions of Ability: High
L	45% (21)	64% (20)
H	55% (26)	36% (11)

CHARACTERISTICS OF PARENTS AS PREDICTORS OF THEIR SATISFACTION WITH SCHOOL PROGRAM

M. Bullock Lamberts
Karen A. Van Wagner

This research report deals with certain social and social-psychological characteristics of parents as predictors of parental satisfaction with current early elementary school programs. In this project, satisfaction refers to (1) how well parents feel that their children are performing in their present school programs and (2) the extent to which parents feel that their children's current school activities provide them with opportunities for academic advancement. Social and social-psychological characteristics used as predictors of satisfaction are (1) parent's marital status; (2) race; (3) parent's educational level; (4) occupation of the family head; (5) parental views on the goals of education, i.e., whether or not the parent felt that education was for the purpose of obtaining a job, gaining knowledge as an end in itself, developing their child as a better person, or easing social adjustment; (6) parental attitudes on ideal intervals of teacher-parent contact as a measure of involvement; and (7) the sex of their child.

Concern for measuring parental satisfaction against the above variables stems from prior research which has indicated that parents are able to exert changes in education at the local level through community pressure. It is also likely that parental satisfaction or dissatisfaction with the schools is transmitted to children, affecting students' perspectives and attitudes toward education. Finally, many parents who are members of ethnic and minority groups in our society have become increasingly vocal as to their dissatisfaction with formal education. It is the purpose of this study to assess certain parental attributes as possible predictors of their satisfaction with existent school programs.

Methods

The population under study in this report consisted of the parents of 300 second grade pupils attending seven different inner city schools in a large industrial city in the midwest. The children were enrolled in Project Follow-Through, Project Read, or the Basal Reading Program. From this population, 82 parents were randomly selected and interviewed during the spring of 1971. The sample was comprised of 25 parents whose children were enrolled in the Follow-Through program; 26 parents whose children were enrolled in the Project Read program, and 31 parents whose children were enrolled in Basal Reading.

In order to determine the relationships of the various social and social-psychological characteristics to parental satisfaction, a multiple regression approach was utilized. This technique dichotomized the predictor attributes according to category and prevalent class. Significance of the variance in the dependent variable (satisfaction) which was 'explained' by the predictor attributes, was obtained using the technique outlined by Melicher (1965).

Results

An obtained R^2 of .58 was utilized to compute an F value in support of the significance of the predictor variables at the .05 level with 71 and 10 degrees of freedom. The technique of analysis permitted the preparation of descriptive profiles of the general characteristics of those parents who were most satisfied and those who were least satisfied with their children's educational experiences. (See Table 1.)

The parents who reported greatest satisfaction with their children's school performances and educational opportunities were unmarried and white. Their own educational backgrounds included some training beyond the high school level which was reflected in their reported occupations as skilled labor, semi-professionals and professaionals. These parents were in favor of four or less teacher-parent conferences each school year. They considered the principal value of education was to be found in the social adjustment of their children.

The most dissatisfied parents were married and black. Their personal levels of education were below high school completion and their occupational prestige levels were low. Their goals for their children were developmental. They felt that teachers and parents should have frequent personal contact. Many of them criticized a perceived lack of interest on the part of teachers. (See Table 2 for complete profiles of parental attributes ranked according to satisfaction levels.)

In a separate analysis, type of program was substituted for educational goals. Among the three programs, generally, the most satisfaction was associated with the all black parents of children in Project Read. Lowest overall satisfaction was indicated by the all white parents of children in Basal Reading despite a slight positive relationship between whiteness and satisfaction. (See Table 3.)

Parents of male students were more satisfied with school performance than were parents with the same attributes whose children were girls.

Implications

Presentation of complete profiles of satisfied and dissatisfied parents, as their attributes are related to all three programs (see Table 2) and to each program separately (see Table 4), should be of interest to school professionals who assign incoming children to suitable elementary programs. The predictors delineated in this study were selected because they could be obtained during the pre-school orientation, or round-up, permitting the assignment of children according to parental profiles during the summer months. The study should also have practical value for the professional whose particular responsibility is toward the selection of curriculum emphases since these three programs encompass three different approaches to early education. Finally, the report has merit for administrators for it pinpoints the sources of public relations strengths and weaknesses.

Table 1

Statistical Profiles of Parents: Characteristics and Differential Satisfaction with School Program

Married 57.97							
White 57.97				Black 57.53			
Education							
Low 57.97		High 58.30		Low 57.53		High 57.86	
Occupation							
High 57.97	Low 57.68	High 58.30	Low 58.01	High 57.53	Low 57.24	High 57.86	Low 57.57

a. Married, White, Low Educational Level, Low Occupational Level

Values for Child's Education							
Idealistic 37.07		Economic 36.88		Developmental 36.80		Social Adjustment 37.86	
Desired Amount of Teacher Contact							
Low 37.07	High 36.22	Low 36.88	High 36.03	Low 36.80	High 35.95	Low 37.86	High 37.01

Sex															
Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
37.07	36.22	36.22	35.37	36.88	36.03	36.03	35.18	36.80	35.95	35.95	35.10	37.86	37.81	37.01	36.16

b. Married, White, Low Educational Level, High Occupational Level

Values for Child's Education							
Idealistic 37.36		Economic 37.17		Developmental 37.09		Social Adjustment 38.15	
Desired Amount of Teacher Contact							
Low 37.36	High 36.51	Low 37.17	High 36.32	Low 37.09	High 36.24	Low 38.15	High 37.30

Sex															
Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
37.36	36.51	36.51	35.66	37.17	36.32	36.32	35.47	37.09	36.24	36.24	35.39	38.15	37.30	37.30	36.45

Table 1 (Con't.)

c. Married, White, High Educational Level, Low Occupational Level

Values for Child's Education															
Idealistic				Economic				Developmental				Social Adjustment			
37.40				37.21				37.13				38.19			
Desired Amount of Teacher Contact															
Low		High		Low		High		Low		High		Low		High	
37.40		36.55		37.21		36.36		37.13		36.28		38.19		37.34	
Sex															
Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
37.40	36.55	36.55	35.70	37.21	36.36	36.36	35.51	37.13	36.28	36.28	35.43	38.19	37.34	37.34	36.49

d. Married, White, High Educational Level, High Occupational Level

Values for Child's Education															
Idealistic				Economic				Developmental				Social Adjustment			
37.69				37.50				37.42				38.48			
Desired Amount of Teacher Contact															
Low		High		Low		High		Low		High		Low		High	
37.69		36.83		37.50		36.65		37.42		36.57		38.48		37.63	
Sex															
Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
37.69	36.84	36.83	35.98	37.50	36.65	36.65	35.80	37.42	36.57	36.57	35.72	38.48	37.63	37.63	36.78

e. Married, Black, Low Educational Level, Low Occupational Level

Values for Child's Education															
Idealistic				Economic				Developmental				Social Adjustment			
36.63				36.44				36.36				37.42			
Desired Amount of Teacher Contact															
Low		High		Low		High		Low		High		Low		High	
36.63		35.78		36.44		35.59		36.36		35.51		37.42		36.57	
Sex															
Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
36.63	35.78	35.78	34.93	36.44	35.59	35.59	34.74	36.36	35.51	35.51	34.66	37.42	36.57	36.57	35.72

f. Married, Black, Low Educational Level, High Occupational Level

Values for Child's Education															
Idealistic				Economic				Developmental				Social Adjustment			
36.92				36.73				36.65				37.71			
Desired Amount of Teacher Contact															
Low		High		Low		High		Low		High		Low		High	
36.92		36.07		36.73		35.88		36.65		35.80		37.71		36.86	
Sex															
Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
36.92	36.07	36.07	35.22	36.73	35.88	35.88	35.83	36.65	35.80	35.80	34.95	37.71	36.86	36.86	36.01

Table 1 (Con't.)

g. Married, Black, High Educational Level, Low Occupational Level

Values for Child's Education															
Idealistic				Economic				Developmental				Social Adjustment			
36.96				36.77				36.69				37.75			
Desired Amount of Teacher Contact															
Low		High		Low		High		Low		High		Low		High	
36.96		36.11		36.77		35.92		36.69		35.84		37.75		36.90	
Sex															
Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
36.96	36.11	36.11	35.26	36.77	35.92	35.92	35.07	36.69	35.84	35.84	34.99	37.75	36.90	36.90	36.85

h. Married, Black, High Educational Level, High Occupational Level

Values for Child's Education															
Idealistic				Economic				Developmental				Social Adjustment			
37.25				37.06				36.98				38.04			
Desired Amount of Teacher Contact															
Low		High		Low		High		Low		High		Low		High	
37.25		36.40		37.06		36.21		36.98		36.13		38.04		37.19	
Sex															
Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
37.25	36.40	36.40	35.55	37.06	36.21	36.21	35.36	36.98	36.13	36.13	35.28	38.04	37.19	37.19	36.34

Single
58.27

White								Black							
58.27								57.83							
Education															
Low				High				Low				High			
58.27				58.60				57.83				58.16			
Occupation															
Low		High		Low		High		Low		High		Low		High	
58.27		57.98		58.60		58.31		57.83		57.54		58.16		57.87	

Table 1 (Con't.)

i. Single, White, Low Educational Level, Low Occupational Level

Values for Child's Education															
Idealistic				Economic				Developmental				Social Adjustment			
37.37				37.18				37.10				38.16			
Desired Amount of Teacher Contact															
Low		High		Low		High		Low		High		Low		High	
37.37		36.52		37.18		36.33		37.10		36.25		38.16		37.31	
Sex															
Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
37.37	36.52	36.52	35.67	37.18	36.33	36.33	35.48	37.10	36.25	36.25	35.40	38.16	37.31	37.31	36.46

j. Single, White, Low Educational Level, High Occupational Level

Values for Child's Education															
Idealistic				Economic				Developmental				Social Adjustment			
37.66				37.47				37.39				38.45			
Desired Amount of Teacher Contact															
Low		High		Low		High		Low		High		Low		High	
37.66		36.81		37.47		36.62		37.39		36.54		38.45		37.60	
Sex															
Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
37.66	36.81	36.81	35.96	37.47	36.62	36.62	35.77	37.39	36.54	36.54	35.69	38.45	37.60	37.60	36.75

k. Single, White, High Educational Level, Low Occupational Level

Values for Child's Education															
Idealistic				Economic				Developmental				Social Adjustment			
37.70				37.51				37.43				38.49			
Desired Amount of Teacher Contact															
Low		High		Low		High		Low		High		Low		High	
37.70		36.85		37.51		36.66		37.43		36.58		38.49		37.64	
Sex															
Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
37.70	36.85	36.85	36.00	37.51	36.66	36.66	35.81	37.43	36.58	36.58	35.73	38.49	37.64	37.64	36.79

l. Single White, High Educational Level, High Occupational Level

Values for Child's Education															
Idealistic				Economic				Developmental				Social Adjustment			
37.99				37.80				37.72				38.78			
Desired Amount of Teacher Contact															
Low		High		Low		High		Low		High		Low		High	
37.99		37.14		37.80		36.95		37.72		36.86		38.78		37.93	
Sex															
Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
37.99	37.14	37.14	36.29	37.80	36.95	36.95	36.10	37.72	36.86	36.86	36.01	38.78	37.93	37.93	37.08

Table 1 (Con't.)

m. Single, Black, Low Educational Level, Low Occupational Level

Values for Child's Education															
Idealistic				Economic				Developmental				Social Adjustment			
36.93				36.74				36.66				37.72			
Desired Amount of Teacher Contact															
Low		High		Low		High		Low		High		Low		High	
36.93		36.08		36.74		35.89		36.66		35.81		37.72		36.87	
Sex															
Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
36.93	36.08	36.08	35.23	36.74	35.89	35.89	35.04	36.66	35.81	35.81	34.96	37.72	36.87	36.87	36.02

n. Single, Black, Low Educational Level, High Occupational Level

Values for Child's Education															
Idealistic				Economic				Developmental				Social Adjustment			
37.22				37.03				36.95				38.01			
Desired Amount of Teacher Contact															
Low		High		Low		High		Low		High		Low		High	
37.22		36.37		37.03		36.18		36.95		36.10		38.01		37.16	
Sex															
Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
37.22	36.37	36.37	35.52	37.03	36.18	36.18	35.33	36.95	36.10	36.10	35.25	38.01	37.16	37.16	36.31

o. Single, Black, High Educational Level, Low Occupational Level

Values for Child's Education															
Idealistic				Economic				Developmental				Social Adjustment			
37.26				37.07				36.99				38.05			
Desired Amount of Teacher Contact															
Low		High		Low		High		Low		High		Low		High	
37.26		36.41		37.07		36.22		36.99		36.14		38.05		37.20	
Sex															
Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
37.26	36.41	36.41	35.56	37.07	36.22	36.22	35.37	36.99	36.14	36.14	35.29	38.05	37.20	37.20	36.35

p. Single, Black, High Educational Level, High Occupational Level

Values for Child's Education															
Idealistic				Economic				Developmental				Social Adjustment			
37.55				37.36				37.28				38.34			
Desired Amount of Teacher Contact															
Low		High		Low		High		Low		High		Low		High	
37.55		36.70		37.36		36.51		37.28		36.43		38.34		37.49	
Sex															
Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
37.55	36.70	36.70	35.85	37.36	36.51	36.51	35.66	37.28	36.43	36.43	35.58	38.34	37.49	37.49	36.64

Table 2

Attributes of Parents Ranked from High Satisfaction to Low

Marital Status	Race	Level of Education	Level of Occupation	Value of Education	Desirable Teacher Contact	
Single	White	High	High	Social	Low	
Single	White	High	Low	Social	Low	
Married	White	High	High	Social	Low	
Single	White	Low	High	Social	Low	
Single	Black	High	High	Social	Low	
Married	White	High	Low	Social	Low	
Single	White	Low	Low	Social	Low	
Married	White	Low	High	Social	Low	
Single	Black	High	Low	Social	Low	
Married	Black	High	High	Social	Low	
Single	Black	Low	High	Social	Low	
Single	White	High	High	Ideal.	Low	
Single	White	High	High	Social	High	
Married	White	Low	Low	Social	Low	
Single	White	High	High	Econ.	Low	
Married	Black	High	Low	Social	Low	
Single	White	High	High	Devel.	Low	
Single	Black	Low	Low	Social	Low	Equal Scores
Married	Black	Low	High	Social	Low	
Single	White	High	Low	Ideal.	Low	
Married	White	High	High	Ideal.	Low	
Single	White	Low	High	Ideal.	Low	
Single	White	High	Low	Social	High	
Married	White	High	High	Social	High	
Single	White	Low	High	Social	High	
Single	Black	High	High	Ideal.	Low	
Single	White	High	Low	Econ.	Low	
Married	White	High	High	Econ.	Low	
Single	Black	High	High	Social	High	
Single	White	Low	High	Econ.	Low	
Single	White	High	Low	Devel.	Low	
Married	Black	Low	Low	Social	Low	
Married	White	High	Low	Ideal.	Low	
Single	White	Low	High	Devel.	Low	
Single	White	Low	Low	Ideal.	Low	
Single	Black	High	High	Econ.	Low	
Married	White	Low	High	Ideal.	Low	Equal Scores
Married	White	High	Low	Social	High	
Single	White	Low	Low	Social	High	
Married	White	Low	High	Social	High	
Single	Black	High	High	Devel.	Low	
Single	Black	High	Low	Ideal.	Low	
Married	Black	High	High	Ideal.	Low	
Single	Black	Low	High	Econ.	Low	
Married	Black	High	High	Econ.	High	
Married	White	High	Low	Econ.	Low	Equal Scores

Table 2 (Con't.)

Marital Status	Race	Level of Education	Level of Occupation	Value of Education	Desirable Teacher Contact
Single	Black	High	Low	Social	High
Married	Black	High	High	Social	High
Single	White	Low	Low	Econ.	Low
Married	White	Low	High	Econ.	Low
Single	Black	Low	High	Social	High
Single	White	High	High	Ideal.	High
Single	Black	Low	High	Econ.	Low
Married	White	High	Low	Devel.	Low Equal Scores
Single	White	Low	Low	Devel.	Low
Married	White	Low	High	Devel.	Low
Single	Black	High	Low	Econ.	Low
Married	White	Low	Low	Ideal.	Low Equal Scores
Married	Black	High	High	Econ.	Low
Married	White	Low	Low	Social	High
Single	Black	High	Low	Devel.	Low
Married	Black	High	High	Devel.	High
Married	Black	High	Low	Devel.	Low
Single	Black	Low	High	Devel.	Low
Single	White	High	High	Econ.	High Equal Scores
Single	Black	Low	Low	Ideal.	Low
Married	Black	Low	High	Ideal.	Low
Married	Black	High	Low	Social	High
Married	White	Low	Low	Econ.	Low
Single	Black	Low	Low	Social	High
Single	White	High	High	Devel.	High
Married	Black	Low	High	Social	High Equal Scores
Single	White	High	Low	Ideal.	High
Married	White	High	High	Ideal.	High
Single	White	Low	High	Ideal.	High
Married	White	Low	Low	Devel.	Low
Married	Black	High	Low	Econ.	Low
Single	Black	Low	Low	Econ.	Low
Married	Black	Low	High	Econ.	Low
Single	Black	High	High	Ideal.	High
Married	Black	High	Low	Devel.	Low
Single	White	High	Low	Econ.	High
Single	Black	Low	Low	Devel.	Low Equal Scores
Married	White	High	High	Econ.	High
Married	Black	Low	High	Devel.	Low Equal Scores
Married	Black	Low	Low	Ideal.	Low
Single	White	Low	High	Econ.	High
Single	White	High	Low	Devel.	High
Married	White	High	High	Devel.	High
Married	Black	Low	Low	Social	High Equal Scores
Married	White	High	Low	Ideal.	High
Single	White	Low	High	Devel.	High
Single	White	Low	Low	Ideal.	High
Single	Black	High	High	Econ.	High
Married	White	Low	High	Ideal.	High Equal Scores

Table 2 (Con't.)

Marital Status	Race	Level of Education	Level of Occupation	Value of Education	Desirable Teacher Contact	
Married	Black	Low	Low	Econ.	Low	
Single	Black	High	High	Devel.	High	
Married	White	High	High	Devel.	Low	
Single	Black	High	Low	Ideal.	High	
Married	Black	High	High	Ideal.	High	
Single	Black	Low	High	Ideal.	High	
Married	White	High	Low	Econ.	High	
Married	Black	Low	Low	Devel.	Low	Equal Scores
Single	White	Low	Low	Econ.	High	
Married	White	Low	High	Econ.	High	
Married	White	High	Low	Devel.	High	
Single	White	Low	Low	Devel.	High	
Married	White	Low	High	Devel.	High	
Single	Black	High	Low	Econ.	High	
Married	White	Low	Low	Ideal.	High	Equal Scores
Single	Black	Low	High	Econ.	High	
Single	Black	High	Low	Devel.	High	
Married	Black	High	High	Devel.	High	
Married	Black	High	Low	Ideal.	High	
Single	Black	Low	High	Devel.	High	
Single	Black	Low	Low	Ideal.	High	
Married	Black	Low	High	Ideal.	High	
Married	White	Low	Low	Econ.	High	
Married	White	Low	Low	Devel.	High	
Married	Black	High	Low	Econ.	High	
Single	Black	Low	Low	Econ.	High	
Married	Black	Low	High	Econ.	High	
Married	Black	High	Low	Devel.	High	
Single	Black	Low	Low	Devel.	High	
Married	Black	Low	High	Devel.	High	
Married	Black	Low	Low	Ideal.	High	
Married	Black	Low	Low	Econ.	High	
Married	Black	Low	Low	Devel.	High	

Table 3

Characteristics of Parents Indicating Differential Satisfaction with School Programs

Married 9.85																			
White 9.85								Black 9.25											
Education																			
Low 9.85				High 10.69				Low 9.25				High 10.09							
Occupation																			
High 9.85		Low 9.75		High 10.69		Low 10.59		High 9.25		Low 9.15		High 10.09		Low 9.99					
Teacher Contact																			
Low 9.85	High 9.31	Low 9.75	High 9.21	Low 10.69	High 10.15	Low 10.59	High 10.05	Low 9.25	High 8.71	Low 9.15	High 8.61	Low 10.09	High 9.55	Low 9.99	High 9.45				
Sex																			
B 9.85	G 9.53	B 9.31	G 8.99	B 9.75	G 9.43	B 9.21	G 8.89	B 10.69	G 10.37	B 10.15	G 9.83	B 10.59	G 10.27	B 10.05	G 9.73	B 9.25	G 8.93	B 8.71	G 8.39
Follow-Through																			
9.53	9.21	8.99	8.67	9.43	9.11	8.89	8.57	10.37	10.05	9.83	9.51	10.27	9.95	9.73	9.41	8.93	8.61	8.39	8.07
Project Read																			
																10.27	9.95	9.73	9.41
No Whites in Sample																No Blacks in Sample			
Basal Reading																			
9.05	8.73	8.51	8.19	8.95	8.63	8.41	8.09	9.89	9.57	9.35	9.03	9.79	9.47	9.25	8.93				

Married 9.85																			
White 9.85								Black 9.25											
Education																			
Low 9.85				High 10.69				Low 9.25				High 10.09							
Occupation																			
High 9.85		Low 9.75		High 10.69		Low 10.59		High 9.25		Low 9.15		High 10.09		Low 9.99					
Teacher Contact																			
Low 9.85	High 9.31	Low 9.75	High 9.21	Low 10.69	High 10.15	Low 10.59	High 10.05	Low 9.25	High 8.71	Low 9.15	High 8.61	Low 10.09	High 9.55	Low 9.99	High 9.45				
Sex																			
B 9.15	G 8.83	B 8.61	G 8.29	B 10.09	G 9.77	B 9.55	G 9.23	B 9.99	G 9.67	B 9.45	G 9.13								
Follow-Through																			
8.83	8.51	8.29	7.97	9.77	9.45	9.23	8.91	9.67	9.35	9.13	8.81								
Project Read																			
10.17	9.85	9.63	9.31	11.11	10.79	10.57	10.25	11.01	10.69	10.47	10.15								
No Blacks in Sample																			

Table 3 (Con't.)

Single 10.09																			
White 10.09								Black 9.49											
Education																			
Low 10.09				High 10.93				Low 9.49				High 10.33							
Occupation																			
High 10.09		Low 9.99		High 10.93		Low 10.83		High 9.49		Low 9.39		High 10.33		Low 10.23					
Teacher Contact																			
Low 10.09		High 9.55		Low 9.99		High 9.45		Low 10.93		High 10.39		Low 10.83		High 10.29		Low 9.49		High 8.95	
Sex																			
B 10.09	G 9.77	B 9.55	G 9.23	B 9.99	G 9.67	B 9.45	G 9.13	B 10.93	G 10.61	B 10.39	G 10.07	B 10.83	G 10.51	B 10.29	G 9.97	B 9.49	G 9.17	B 8.95	G 8.63
Follow-Through																			
9.77	9.45	9.23	8.91	9.67	9.35	9.13	8.81	10.61	10.29	10.07	9.75	10.51	10.19	9.97	9.65	9.17	8.85	8.63	8.31
Project Read																			
No Whites in Sample														10.51	10.19	9.97	9.65		
Basal Reading																			
9.29	8.97	8.75	8.43	9.19	8.87	8.65	8.33	10.13	9.81	9.59	9.27	10.03	9.71	9.49	9.17				

Table 4

Attributes of Parents Ranked from High Satisfaction to Low by Educational Program

Marital Status	Race	Level of Education	Level of Occupation	Desirable Teacher Contact	Type of Program	
Single	Black	High	High	Low	Project Read	
Single	Black	High	Low	Low	Project Read	
Married	Black	High	High	Low	Project Read	
Married	Black	High	Low	Low	Project Read	
Single	Black	High	High	High	Project Read	
Single	Black	High	Low	High	Project Read	
Single	White	High	High	Low	Follow-Through	
Married	Black	High	High	High	Project Read	
Single	Black	Low	High	Low	Project Read	
Single	White	High	Low	Low	Follow-Through	Equal
Married	Black	High	Low	High	Project Read	
Single	Black	Low	Low	Low	Project Read	
Married	White	High	High	Low	Follow-Through	
Married	Black	Low	High	Low	Project Read	
Married	Black	Low	Low	Low	Project Read	
Single	White	High	High	Low	Basal Reading	
Single	White	High	High	High	Follow-Through	
Single	White	High	Low	Low	Basal Reading	
Single	Black	High	High	Low	Follow-Through	
Single	White	High	Low	High	Follow-Through	
Single	Black	Low	High	High	Project Read	
Single	Black	High	Low	Low	Follow-Through	
Married	White	High	High	Low	Basal Reading	
Single	Black	Low	Low	High	Project Read	
Married	White	High	High	High	Follow-Through	
Married	White	High	Low	Low	Basal Reading	
Single	White	Low	High	Low	Follow-Through	
Married	Black	High	High	Low	Follow-Through	Equal
Married	Black	Low	High	High	Project Read	
Married	White	High	Low	High	Follow-Through	Equal
Single	White	Low	Low	Low	Follow-Through	
Married	Black	High	Low	Low	Follow-Through	Equal
Married	Black	Low	Low	High	Project Read	
Single	White	High	High	High	Basal Reading	
Married	White	Low	High	Low	Project Read	
Single	White	High	Low	High	Basal Reading	
Single	Black	High	High	High	Follow-Through	
Married	White	Low	Low	Low	Follow-Through	
Single	Black	High	Low	High	Follow-Through	
Married	White	High	High	High	Basal Reading	
Single	White	Low	High	Low	Basal Reading	
Married	White	High	Low	High	Basal Reading	
Married	Black	High	High	High	Follow-Through	
Married	White	Low	High	High	Project Read	Equal

Table 4 (Con't.)

Marital Status	Race	Level of Education	Level of Occupation	Desirable Teacher Contact	Type of Program	
Single	White	Low	Low	Low	Basal Reading	
Single	Black	Low	High	Low	Follow-Through	
Married	Black	High	Low	High	Follow-Through	Equal
Single	White	Low	Low	High	Follow-Through	
Single	Black	Low	Low	Low	Follow-Through	
Married	White	Low	High	Low	Basal Reading	
Married	White	Low	High	High	Follow-Through	
Married	White	Low	Low	Low	Basal Reading	
Married	Black	Low	High	Low	Follow-Through	
Married	White	Low	Low	High	Follow-Through	
Married	Black	Low	Low	Low	Follow-Through	
Single	White	Low	High	High	Basal Reading	
Single	White	Low	Low	High	Basal Reading	
Single	Black	Low	High	High	Follow-Through	
Single	Black	Low	Low	High	Follow-Through	
Married	White	Low	High	High	Basal Reading	
Married	White	Low	Low	High	Basal Reading	
Married	Black	Low	High	High	Follow-Through	
Married	Black	Low	Low	High	Follow-Through	

AN EXPLORATORY ANALYSIS OF TEACHER ACCOUNTABILITY

With the emerging tide of increased pressures for teacher and administrative responsibility within education (particularly with the innovation of contract learning), the subject of teacher accountability has assumed new significance. In the past it was felt that there was little that a teacher could do about student ability since a student's performance was limited by his inherent capacity as determined by certain genetic qualities. However, the perspectives in education today are drastically changing; increasingly the responsibility for student performance is being placed upon the teacher and school system.

Little is known, however, about the effects of increased teacher accountability upon the teacher, the school system, or the student. It is the purpose of this analysis to examine the relationship between accountability and teacher satisfaction, both from the teachers' perceptions of accountability and the concomitant effects.

Method

Accountability can be defined in many ways for various purposes. A teacher, for example, may be held accountable by the school administration for her classroom behavior, by the public for teaching methods or subject content, or to the student for his performance. For the purpose of this paper, teacher accountability refers to the extent to which a teacher is directly held responsible for her students' performance and achievement. In other words, the term as used here and as defined for the teacher sample, places direct responsibility upon the teacher for the students' performance.

Sixty-four teachers from three different programs were randomly selected for the sample: 21 from Follow-Through (high accountability group), 15 from Project Read (medium group), and 28 from Basal Reading (low accountability group).

The programs were tri-chotomized into high (Follow-Through), medium (Project Read), and low (Basal Reading) accountability groups.[1]

The teachers responses were first examined by frequency, cross-tabulation, Chi-square, and theta analysis in order to ascertain the basic parameters and characteristics of the sample (refer to chapter on teachers data for description of the sample).

Findings

As shown in Table 1, teachers in general were satisfied with the level of accountability they had in their respective program. Over 80% of all groups expressed satisfaction, and none expressed strong dissatisfaction.

Table 1

Extent of Satisfaction with Accountability, by Program

	Quite Satisfied	(N)	Reasonably Satisfied	(N)	Dissatisfied	(N)	Quite Dissatisfied	(N)	Not Accountable	(N)	
Follow-Through	33%	7	43%	9	19%	4	0%	0	5%	1	100%
Project Read	33%	5	47%	7	20%	3	0%	0	0%	0	100%
Basal Reading	28%	8	68%	19	4%	1	0%	0	0%	0	100%

In order to ascertain whether there were actual differences in the levels of accountability by program, teachers were asked if they felt they were held more accountable because of their school program. Table 2 shows marked differences in perceptions of extent of accountability by program. Over 95% of the Follow-Through teachers (high accountability group) felt they were held more or much more accountable because of their program, as opposed to 40% of the Project Read teachers and

[1] The logic of this approach is presented in Chapter 1, Section II under the headings of Organizational Complexity and Specialization.

only 10% of the Basal Reading group (low accountability group). The large majority of the Basal Reading group teachers (38%) felt that no additional accountability was connected with their classroom program.

Table 2

Teachers' Perceptions of Extent of Accountability, by Program Type

	Much More		More		Less		None		
		(N)		(N)		(N)		(N)	
Follow-Through	52%	11	43%	9	5%	1	0%	0	100%
Project Read	13%	2	26%	4	6%	1	53%	8	100%
Basal Reading	4%	1	8%	2	4%	1	83%	23	100%
	$X^2 = 37.3$		P .001		df = 6		$\theta = .66$		

The nearly unanimous reports of high accountability by Follow-Through teachers and the feeling of no impact by Basal Reading teachers provides a substantial basis for the basic assumption of trichotomizing the groups into high, medium, and low accountability groups. This finding, when contrasted with Table 1, provides an interesting and important observation: although there are definite differences in levels of accountability of the programs, there are no significant differences in the teachers' reports of satisfaction. The pressures of high accountability do not create more dissatisfaction. This finding is in direct contradiction to what one would conclude from the literature relating to teacher surveillance; i.e., generally teachers do not like close critical surveillance by administrators or the public, and greater accountability inherently must bring more surveillance.[2] However, accountability and surveillance, though related, are different dimensions and this contradiction suggests there is some indigenous quality in accountability that neutralizes the antagonistic elements of surveillance.

[2] Surveillance can also be defined in several ways. Generally, and as used here, it refers to critical observance of the teachers' performance.

Further analysis as to the source of accountability showed basically similar findings, varying only in extent. While Project Read teachers felt somewhat more pressure from fellow teachers, Follow-Through teachers felt more pressure from their supervisors. (See Tables 3 and 4.) Basal Reading (low accountability group) teachers felt only moderate pressure from both sources. These differences are partially and plausably explained by differences in structure of the programs. The Follow-Through program was much more highly structured with a more elaborate supervisory heirarchy than other groups (refer to Chapter I, Seccion II, Organizational Complexity). Thus it might be expected that they would perceive more pressure from supervisory sources.

Table 3

Identification of Source of Pressures for Accountability, by Program

	Administration		Parents		Fellow Teachers		
		(N)		(N)		(N)	
Follow-Through	85%	18	5%	1	10%	2	100%
Project Read	40%	6	13%	2	46%	7	100%
Basal Reading	44%	12	18%	5	18%	5	100%

$X^2 = 10.8$ $P > .05$ $df = 4$ $\theta = .32$

Table 4

Extent of Pressures for Accountability From Administrative and Parental Sources, by Program

	Administrative Sources								Parental Sources							
	Very		Moderate		Unsure		None		Very		Moderate		Unsure		None	
	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
Follow-Through	71	15	19	4	9	2	0	0	52	11	28	6	14	3	5	1
Project Read	46	7	26	4	26	4	0	0	80	12	13	2	6	1	0	0
Basal Reading	36	10	50	14	14	4	0	0	21	6	61	17	14	4	3	1

$\theta = .23$ $X^2 = N.S.$ $X^2 = 15.4$ $P > .05$ $\theta = .36$

Project Read teachers, however, had significantly more parental contact than teachers in other programs (see section on teachers data; more Follow-Through students were bussed than Project Read students). Thus pressures for teacher performance were felt from both administrators and parents.

In order to ascertain the effects of accountability per se, two different approaches were utilized: cross-tabulation and the Automatic Interaction Detection Program.

First, it is important to examine the relationship between levels of accountability and their effects upon the teacher. The total teacher sample was dichotomized into high and low accountability groups according to program. An examination of Table 5 shows that 28% of teachers in the high group felt their level of accountability had increased their work load considerably, as opposed to only 3% for the low group. Accountability does appear both logically and statistically to require more effort for teachers. More accountability means more testing, more preparation, and more supervision of students. However, this finding, when contrasted with Table 1, is interesting; although more accountability means more work, there is not a corresponding decrease in satisfaction. Thus, some intervening variable may be causing satisfaction to increase with higher levels of accountability.

Table 5

Extent of Work Created by Level of Accountability

	Considerably More		Some More		Less		None	
	%	(N)	%	(N)	%	(N)	%	(N)
High	28	6	52	11	0	0	9	2
Low	3	1	54	15	3	1	36	10

$X^2 = 9.4$ $P > .01$ $df = 3$ $\theta = .45$

As a check on this discrepance, the related variables of teaching effectiveness and sense of professionalism were examined in Table 6. The high accountability group responded more positively than the low group: 47% (vs. 32%) felt that high

accountability had improved their teaching performance and corresponding sense of professionalism, although a significant portion of the group (28%) felt it had a negative impact.

Table 6

Effect of Level of Accountability Upon Teacher Effectiveness and Sense of Professionalism

	Improved Effectiveness and Professionalism		Reduced Effectiveness and Professionalism		No Response	
	%	(N)	%	(N)	%	(N)
High Acct.	47	11	28	6	25	5
Low Acct.	32	8	4	1	64	16

As a precautionary measure, several other variables were examined: (1) satisfaction with in-service training, (2) the cooperation of supervisors, and (3) the supervisors' evaluation process. On each of these variables, no strong source of dissatisfaction was discovered for the high accountability group. However, the low accountability group expressed strong dissatisfaction with the in-service training and supervisors cooperation. To further confirm this, theta values (.47 and .74 for each respective group) suggested the relationship was quite stable. The high satisfaction expressed by the high accountability group suggests the possibility that the extra in-service training, along with the assistance and cooperation of supervisors, may be a major factor in increasing satisfaction with greater accountability. The limited size of the sample prevents any confirmation of this hypothesis.

Table 7

Satisfaction with In-Service Training, Cooperation of Supervisors, and Supervisors Evaluation Process, by Level of Accountability and Program

	In-Service Training				Supervisors Cooperation				Supervisors Evaluation Process			
	Satisfied		Dissatisfied		Satisfied		Dissatisfied		Satisfied		Dissatisfied	
	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
High	79	15	21	4	86	18	14	3	80	16	20	4
Low	32	8	68	17	12	3	88	22	76	19	24	6
	θ = .47				θ = .74				θ = .04			

Thus, on the basis of cross-tabulation, Chi-square, and theta analysis, it would appear that greater accountability tends to (1) increase teacher satisfaction, (2) increase the work load required for teachers, and (3) improve the teachers' sense of effectiveness and professionalism. Further, satisfaction with high accountability appears to be associated with in-service training and the cooperation of supervisors.

Although the previous analysis gives several significant insights into the effects of levels of accountability upon teacher satisfaction, we do not yet know the exact relationship of each variable to the other. In addition, within the variables examined thus far, accountability and program are inseparably linked together. One cannot be sure whether it is satisfaction with the level of accountability, or the program that is being measured. It is thus desirable to separate these two variables and assess the impact of each one upon teacher satisfaction. To best accomplish this, an Automatic Interaction Detection analysis was conducted.[3]

The AID analysis allows each of a selection of independent variables to be considered both separately and to compete with each other variable to determine its relative importance in explaining the variation in the dependent variable. In this fashion, only the most influential variables would emerge from the competition to explain variation in the extent of satisfaction associated with teachers levels of accountability. Teacher satisfaction was measured on a scale ranging from 1- (quite satisfied) to 4- (quite dissatisfied). Program type is allowed to "float" as an independent variable which can enter at any time to explain satisfaction with level of accountability.

The variable that "explains" the most variations in teachers' satisfaction with their level of accountability is the success and effectiveness of the program in use in the school. The variable split into high ($\bar{X}$ = 1.5) and low ($\bar{X}$ = 2.3) groups

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[3] Sonquist, John A., and Morgan, James N.; The Detection of Interaction Effects, Ann Arbor: University of Michigan, 1964.

according to the satisfaction associated with the program's success. If teachers felt their academic program was effectively achieving its goals and objectives, teachers were quite satisfied with being held accountable.

This finding is not really surprising. Success has many partners, but failure has none. However, the immediate emergence of this variable at least lends validity to the structure of the analysis.

For teachers who felt their program was not achieving its objectives (parent group 3, $\bar{X} = 2.3$), the most prominent concern was their students' interest in their school work (groups 8 and 9). The most dissatisfaction ($\bar{X} = 2.8$) was expressed when students were indifferent to their school work. Teachers were willing to accept accountability when students had high interest in school work even though they did not feel the program was accomplishing its objectives.

When teachers felt their program was accomplishing its objectives (parent group 2, $\bar{X} = 1.5$), high satisfaction with level of accountability, the next most prominent concern was the evaluation process utilized by their superiors. Teachers were divided in their satisfaction with their accountability by the frequency that supervisors discussed classroom problems with them (groups 4 and 5). Project Read and Follow-Through teachers were more satisfied with their supervisors' evaluation process than were Basal Reading teachers. Follow-Through teachers also met with their supervisors much more ofter, while Basal Reading teachers rarely discussed classroom problems with supervisors.

Group 4 teachers (who expressed the most satisfaction up to this point in the analysis) were capable of further splitting by the number of years of teaching (groups 6 and 7). Less experienced teachers (less than 10 years teaching) were more willing to accept accountability and were more concerned ($\bar{X} = 1.1$ vs. 1.7) with discussing classroom problems with supervisors than more experienced teachers (over 10 years teaching). However, experience should not be equated with age. There was no information to justify this connection.

It was also noted that socio-economic status accounted for a major portion of the difference in satisfaction among teachers of long standing (groups 12 and 13). Teachers with spouses employed at lower occupational prestige levels expressed much greater satisfaction, suggesting that they had possibly reached the pinnacle of progress of their career. Their achievement had surpassed that of other members of the immediate family, perhaps giving limited incentive for greater advancement.

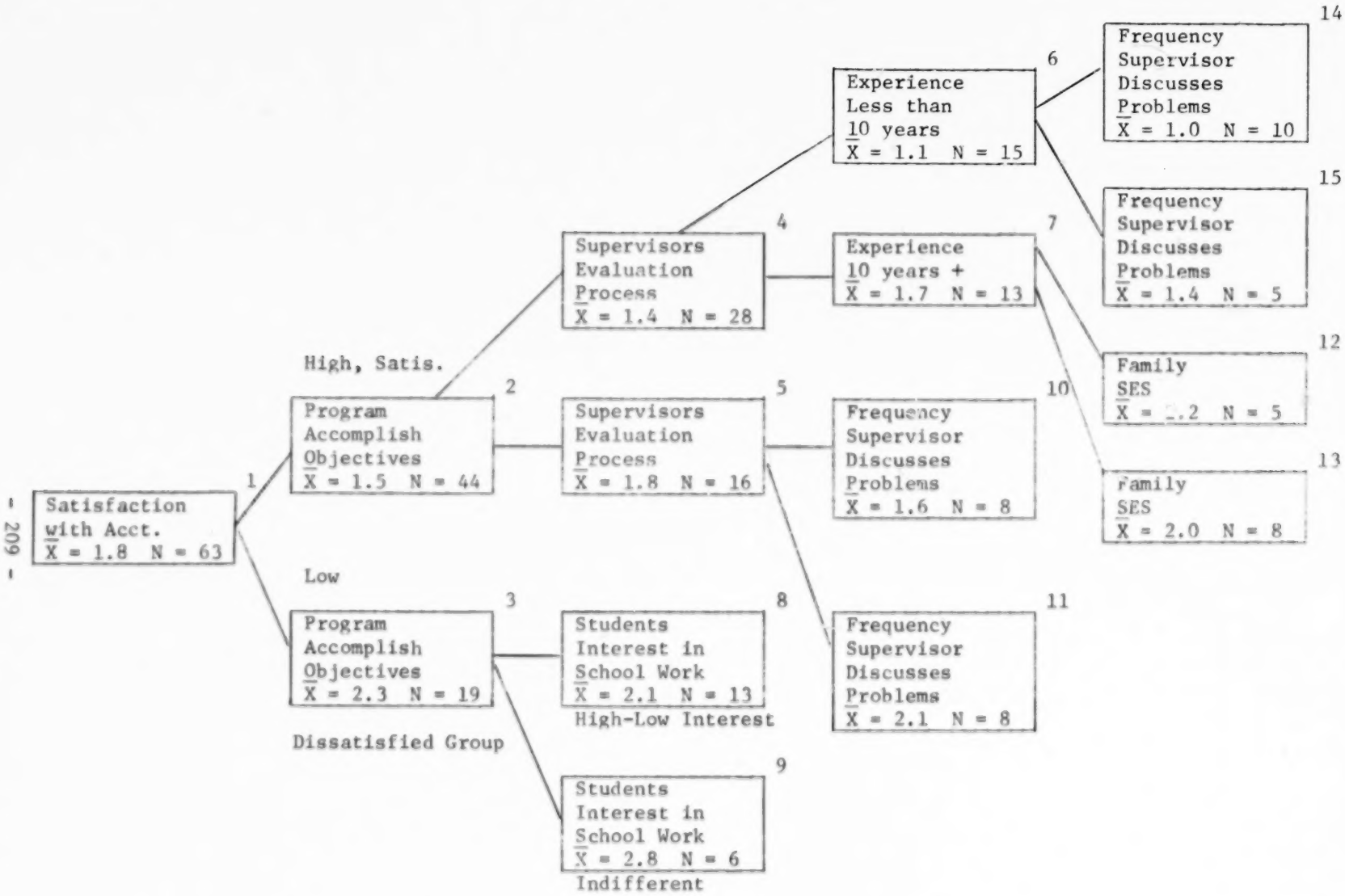
Higher SES teachers, however, had a different reference group. Compared to other family members, their achievement was nominal, perhaps creating less satisfaction with career progress. It should be noted, however, that the variable of socioeconomic status accounts only for final groups, both of rather small cell size, indicating that the differences though real are rather small.

Conclusion

Teachers in general were quite satisfied with the level of accountability they held in their position. There was only small variation in satisfaction by programs and levels of accountability ($\bar{X}$ = 1.7 to 2.1). However, considering that there is a considerable difference in the level of accountability required by the different programs, this lack of difference is significant.

On the basis of this report, one could predict that the current trend toward greater accountability in education does not necessarily create more dissatisfaction among teachers. On the contrary, this analysis suggests that greater accountability may increase a teacher's sense of effectiveness and professionalism. The additional in-service training along with positive assistance from supervisors may be the intervening factors that increase satisfaction and teacher effectiveness. Further, in the placement of teachers into contract learning or highly structured experimental programs, some tentative preference toward less experienced teachers may be warranted.

It is unfortunate that this brief study cannot provide definite definitive empirical grounds for the above conclusions; however, the study was exploratory, conducted with no preestablished conclusions to direct the collection of data. Although numerous speculative hypotheses have been voided, this paper has provided the basis for the formulation of more specific hypotheses.


Satisfaction with Acct. X = 1.8 N = 63
1
Program Accomplish Objectives X = 1.5 N = 44
High, Satis.
2
Supervisors Evaluation Process X = 1.4 N = 28
4
Experience Less than 10 years X = 1.1 N = 15
6
Frequency Supervisor Discusses Problems X = 1.0 N = 10
14
Experience 10 years + X = 1.7 N = 13
7
Frequency Supervisor Discusses Problems X = 1.4 N = 5
15
Supervisors Evaluation Process X = 1.8 N = 16
5
Frequency Supervisor Discusses Problems X = 1.6 N = 8
10
Family SES X = 2.2 N = 5
12
Family SES X = 2.0 N = 8
13
Low
Program Accomplish Objectives X = 2.3 N = 19
3
Dissatisfied Group
Students Interest in School Work X = 2.1 N = 13
8
High-Low Interest
Frequency Supervisor Discusses Problems X = 2.1 N = 8
11
Students Interest in School Work X = 2.8 N = 6
9
Indifferent

FOURTH YEAR RESULTS IN EXPERIMENTS IN EARLY EDUCATION: COST STUDIES

Jane A. Bonnell

In this study, three programs were investigated: Follow-Through, Project Read and Basal Reading.

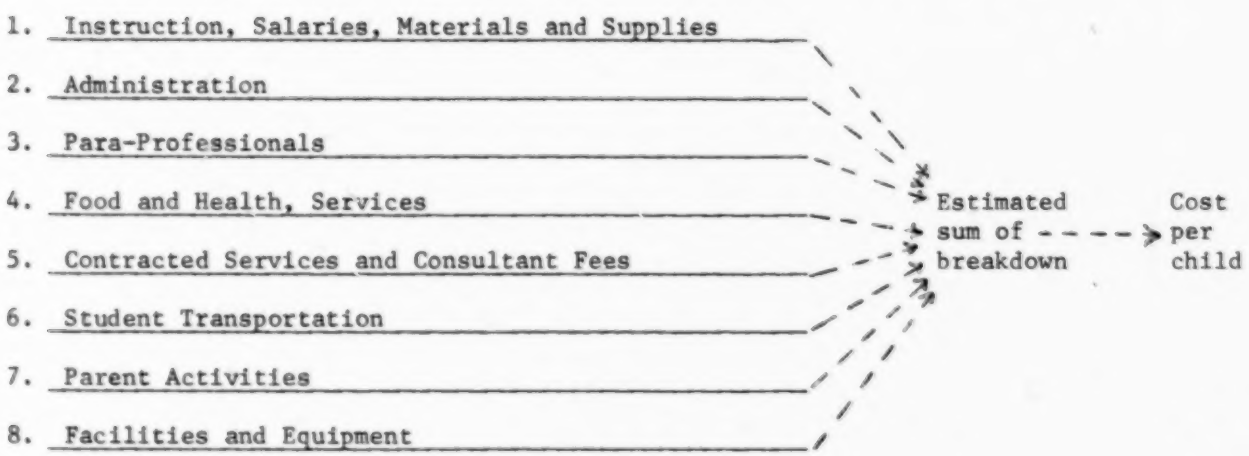
Principal objective of the cost study is to provide a realistic estiamte of the cost per child and to relate the costs to outcomes of the education work. The cost estimate is based upon resources (personnel, services, material and direct and indirect costs) needed for each aspect of the program. Total cost estimate for the program is the sum of the breakdown of the total effort. Cost per child is based upon this information and can be related to the variables identified for study. Many variables were investigated in the studies of the three programs:

1. Pupil (5)
2. Teacher (5)
3. Organizational (12)
4. Community (5)

The cost estimate is based upon the information per Figure 1.

Figure 1

Relationship Between Program and Costs



Cost of the Three Programs

Follow-Through Program

All of the project breakdown items (as shown in Figure 1) are present in this program. The reading program costs are approximately $278.15 per child.

Basal Reading Program

The project breakdown items present in this program are numbers 1 and 3. The reading program costs per child in this program are approximately $162.83 per child.

Project Read

The project breakdown items present in this program are numbers 1 and 3. The reading program costs per child in this program are approximately $205.63 per child.

Summary

The cost estimate for each program varies based upon the number of resources present and the extent to which these are provided. These costs are exclusive of the over-all district costs in administration, services, consultant work, transportation, facilities and equipment afforded to all programs.

The Follow-Through Reading Program costs per child are the greatest. The Project Read costs per child are about three-fourths those of the Follow-Through Program. The Basal Reading Program costs are approximately three-fifths those of the Follow-Through Reading Program and approximately fourth-fifths those of Project Read.

APPENDICES

APPENDIX A

INSTRUMENTS FOR COLLECTION OF DATA ON PUPILS

1. Basic Census Data for Pupils
2. Classroom Observation Forms
   a. Adjustment
   b. Work Habits
   c. Definition of Observation Criteria
3. Classroom Climate Schedule
4. Teachers' Summary Evaluation of Pupils
5. Self-Concept Measure

Attachment A

BASIC CENSUS DATA ON SPECIAL PROGRAMS
Grand Rapids Public Schools
January 1971

Column Number

1. I.D. Code (1971) _____ (1-3)

2. Name _____ Address _____ (4-20)
Phone _____

3. Current Program (21)
Follow Through _____ (1)
Project Read _____ (2)
Basal Reading _____ (3)
Control _____ (4)

4. Previous I.D. Number _____ (22-24)

5. Sex (25)
Male _____ (1)
Female _____ (2)

6. Race (26)
White _____ (1)
Negro _____ (2)
Other _____ (3)
(Specify)

7. Name of Father _____

8. Name of Mother _____

9. Child's Physical Handicap (if any) _____ (27)
Handicapping classroom participation?
No _____ (1)
Yes _____ (2)
Not Applicable _____ (9)

10. Language Spoken (28)
English only _____ (1)
English and _____ (2)
Non-English _____ (3)
(Specify)
No information _____ (9)

11. Currently Living With: (29)
Original Parents _____ (1)
Mother and Stepfather _____ (2)
Father and Stepmother _____ (3)
Neither (Specify) _____ (4)
Only Mother _____ (5)
Only Father _____ (6)
No Information _____ (9)

12. Current Marital Status of Parents: (30)

Married _____ (1)
Divorced _____ (2)
Separated _____ (3)
Remarried _____ (4)
Other _____ (5)
(Specify)
No information ___ (9)

13. Current Teacher _____ (31)
(Check code list for code number)

14. Father's Occupation _____ (32)
(Specify and give code number)
Code Number _____

(1) ___ Professional, technical
(2) ___ Business Manager, officials, proprietors
(3) ___ Clerical and sales worker
(4) ___ Craftsman, foreman, and kindred worker
(5) ___ Armed forces and police
(6) ___ Unskilled, service and domestic worker
(7) ___ Housewife
(8) ___ Uncodable
(9) ___ Don't know

15. Mother's Occupation _____ (33)
Code Number _____

16. Number of siblings: _____ (code) (34)

Number	Code Number
0	0
1	1
2	2
3	3
4-5	4
6-8	5
9-10	6
11 +	7
No information	9

Number of brothers _____
Number of sisters _____

17. Schools attended: (Specify)

	School	Program participated in: Program	Grade	
(35-36)	_____	_____	Pre-School	(37)
(38-39)	_____	_____	Kindergarten	(40)
(41-42)	_____	_____	1st Level	(43)
(44-45)	_____	_____	2nd Level	(46)

18. Teacher Evaluation of Achievement:

School	Reading	Spelling	English	Social Studies	Science	Arithmetic			
									Pre-School
									Kindergarten
									1st Level
									2nd Level
Cols. (47-48)	(49)	(50)	(51)	(52)	(53)	(54)	(55)	(56)	

(Code for 2nd Level only) Code: 1 = progressing very well
2 = progressing satisfactorily
3 = progressing slowly

19. Intelligence Testing:

Name of Test	Grade Level	I.Q.

Cols. (57) (Code for 2nd Level only) (58-60)

Test Code: 1 = Ind. Stanford-Binet
2 =
3 =

20. Achievement Testing (Educational Development)
(2nd Level only)

Test Code:		Level	Standard Score (62-63)
Readiness Test (61)	1 = Lee Clark		
	2 = Metropolitan		
	3 = (Specify)		
Achievement Test (64)	1 = Wide Range		(65-66)
	2 = Stanford Achievement Battery		
	3 = (Specify)		

Achievement Testing (continued)

Reading Test (67) Level Standard Score (68-69)

1 = Stanford Reading Test _____

2 = _____

3 = _____

Other (Specify) (70)

21. Record of Special Services Code: 1 = Received Services (71)
2 = No Special Services

Type of Service	Remarks

Classroom Observation Data

Data Summary

Student I. D. _____

Name _____ Program _____

School _____ Teacher _____

Sex _____ Date _____ Hour _____ Race _____

Adjustment Variables:

Total Frequency

Inappropriate Verbal Behavior . . . . . _____

Leaves Work Area . . . . . _____

Shifts Work Task . . . . . _____

Inattentive Behavior . . . . . _____

Withdrawal Behavior . . . . . _____

Physical Aggression . . . . . _____

Self _____
Others _____
Objects _____

Work Habits:

Total Minutes

Task Oriented Behavior . . . . . _____

Inappropriate Play Behavior . . . . . _____

Inappropriate Verbal Behavior . . . . . _____

Inappropriate Visual Behavior . . . . . _____

Inappropriate Mobility . . . . . _____

Observer _____

PERSONALITY ADJUSTMENT VARIABLES: Hour _____

Name _____ Name _____

Chart Frequency of Occurance

	Total			Total
1.	( ) _____	INAPPROPRIATE VERBAL BEHAVIOR (Talking Loudly, Singing, Interrupts Others)	_____	( )
2.	( ) _____	LEAVES WORK AREA	_____	( )
3.	( ) _____	SHIFTS WORK TASK	_____	( )
4.	( ) _____	INATTENTIVE BEHAVIOR (Expressing boredom, slumps)	_____	( )
5.	( ) _____	WITHDRAWAL BEHAVIOR (Expresses disgust, suiks, smirks)	_____	( )
6.		PHYSICAL		
	( ) _____	Self	_____	( )
	( ) _____	Others	_____	( )
	( ) _____	Objects	_____	( )

Comment on Back of Page Observers _____

_____

TIME STUDY OF WORK HABITS

Name _____ Name _____

ITEMS	1	5	10	15	20	25	30	Total Minutes	1	5	10	15	20	25	30	Total Minutes
1. Concentrates Works								( )								( )
2. Plays during work period								( )								( )
3. Talking with others								( )								( )
4. Looks around aimlessly								( )								( )
5. Walks around aimlessly								( )								( )
6. Other (Specify)								( )								( )

Definition of categories:

Task Oriented Behavior

Concentration and Work: Self-motivated, self-directed, capable of working alone without pressure from teacher.

Non-Task Oriented Behavior

Playing: Play activity that is clearly of a non-academic nature, playing with objects, undirected, inappropriate play for the classroom setting.

Talking with others: Talking inappropriately for more than 15 seconds of a non-academic nature.

Looks around: Looks around room or stares inappropriately at something else for 15 seconds or more.

Walks around: Walks around without direction or with inappropriate motive.

Definition and Description of Criteria for
Classroom Observation Study

Definition of Work Habits

1 Task-Oriented Behavior: Student should be self-motivated and self-directed while working alone during designated work period. Observations should begin when the teacher has given an assignment for the student to complete by himself at his desk or table. The student must work at his designated task for at least 60 seconds to qualify for checking the one-minute categories. As long as the student is actively working at his assigned task, do not note behavior in other categories (occasional vocalization, looking around for a few seconds, standing while working) and total activity as active concentration. Observer should record other categories only when there is a complete shift of attention from work task to other activity for at least 15 seconds, during which the student fails to return to his work task.

2 Non-Task Oriented Behavior: Play activity should only be recorded when the child has been assigned a task and he is playing instead of working as instructed. Playing must involve a total shift of attention from the work task. Play activity may consist of doodling, playing with pencil, paper, clothes, hands, directing attention to others by facial or bodily expression, etc. Student must play for at least 15 seconds for the minute category to be recorded. Any time period of 15-60 seconds constitutes a minute category. The play and following categories (categories 2-5) may receive notation simultaneously, for the same minute, but are exclusive from the concentration - work category.

Once the student has completed his assigned task, play activity (and other categories 2-5) is considered appropriate and should not be recorded.

3 Categories 2-5: The remaining categories are measured in the same fashion as category 2. The activity should endure for at least 15 seconds to be recorded,

and any 15-60 seconds activity is considered as one minute. The activity should involve a total shift of attention from the work task and should not be recorded once the assigned task is fulfilled.

Categories 2-5 may receive simultaneous notation for the same minute, providing each activity fulfills the 15 second time requirement. However, all categories must be exclusive from category one.

4. Category 6: Category 6 is an open category to allow observers to note an activity that may appear to have relevance for the study. Observers may plot the activity as they feel appropriate (probably the 15 second rule), and should designate the type and effect of the activity on the back of the page.

Personal Adjustment Variables

1. Inappropriate Verbal Behavior: Inappropriate verbal behavior would consist of talking intentionally or making noise when the student should be working at an assigned task. Observer would begin observation after the teacher has assigned a work task (working math, reading, coloring, drawing) and the students begin working as a work group.

   Vocalizations appropriate to the classroom activity should not be recorded (asking a question of another student about school work, answering question from teacher, etc.). If the student is interrupted by another child, vocalizations are not inappropriate unless pursued and indulged in actively by the observed student for at least 15 seconds or more.

   Only verbal interaction enduring for at least 15 seconds would constitute a unit of measurement, with a unit of measurement consisting of 15-60 seconds. Any succeeding unit of 15-60 seconds would constitute an additional unit of measurement.

2. Inappropriate Mobility (Leaving Work Area): The basic criteria for leaving the work area would consist of actual movement away from the seated position of work, or any total shift of attention and movement away from the work task. For

example, if the student is standing partly on the chair but still concentrating upon the work task, this would not constitute leaving the work area. However, if the student turned around in his chair or left the chair with non-academic objectives, a unit of measurement would be completed. Movement should endure for 15 seconds to be significant and recorded for each 15-60 seconds of continuation.

3. Shifts Work Task: This would involve a shift of task while still continuing work (i.e., from working arithmetic to reading, to coloring).

4. Categories 4-6: Categories 4-6 constitute a generalized continuum and are mutually exclusive in notation (if any single category is checked, such as physical aggression against others, it is assumed that the child is also expressing inattentive and withdrawal behavior).

Measurement is achieved by notation in the most appropriate and descriptive column and no notation in the other column of this set of categories.

Active neglect of the work task is necessary before inattention behavior is appropriately noted. Inattention or withdrawal behavior must endure for a definite time period (perhaps 15 seconds or more and not just a momentary expression) and should be noted for each 60 seconds it occurs. Physical aggression should be noted by separate sets of occurences, i.e., hitting a classmate three times in rapid succession (but all part of one emotional outburst) would constitute one unit of measurement. Hitting different classmates would constitute separate units of measurement, or resuming aggression after several seconds hesitation between outbursts.

Students may, however, progress from stage to stage in minute units of measurement, such as first expressing inattentive behavior for a time period, then progressing to withdrawal or aggressive behavior in succeeding time units. Inattentive behavior should not be recorded after the student has completed his work assignment and is waiting for new instructions.

CLASSROOM CLIMATE SCHEDULE
(Record both teacher and aides as combined unit)

School _____ Program _____ Teacher _____

Date _____ Time: (___) A.M. (___) P.M.

1. General organization of activities

(Consider organization of setting, cleaniness, order of classroom articles, smoothness of transition in daily activities.)

___ Highly organized, orderly
___ Well organized, orderly
___ Moderately organized, orderly
___ Poorly organized, orderly
___ Largely disorganized, disruptive

2. Opportunity for independently motivated learning activity

___ Pupils choose frequently to pursue what is of interest to them from a variety of available activities.
___ Pupils have some opportunity to choose activities of interest to them from some available activities.
___ Pupils have little opportunity to pursue activities of interest to them although they are available.
___ Pupils have little opportunity to pursue activities of interest to them and none are available.

3. General level of discipline in classroom (control over classroom situation)

___ Strict discipline over pupils
___ Moderate discipline over pupils
___ Poor discipline over pupils

4. Form of discipline

___ Teacher uses physical action (slapping, spanking, touching or handling pupils)
___ Teacher uses stern verbal action
___ Teacher uses polite persuasion to conform
___ Teacher takes little action or ignores pupils' behavior

5. General evaluation of teacher treatment of children

___ Kind, considerate, attentive to pupils needs and concerns
___ Gives attention to pupils
___ Treats pupils fairly and considerately
___ Somewhat cool and distant to pupils, little involvement
___ Detached concern

6. Level of communication in classroom

___ Open, comfortable with self-discipline of themselves by pupils with teacher as guide
___ Moderately open and comfortable with some degree of self-discipline of themselves by pupils and some by teacher (and aides)
___ Restrained and uncomfortable with control by teacher (and aides)

7. General, attitude and behavior of pupils in classroom

___ Pupils happy, joyful, pleasant, enjoying school, participating actively
___ Pupils somewhat restrained, generally pleasant responses, participating
___ Pupils restrained, some responses, little participation
___ Pupils highly restrained, seem fearful of teacher, under tension, express anxiety

8. Form of student activity

___ Pupils rarely disrupted, highly attentive to assigned activities, quiet, little inappropriate activity
___ Pupils occasionally disrupted, sometimes distracted by other classroom activities, occasional verbal expressions, occasional inappropriate activity
___ Pupils frequently disrupted, frequently distracted by other classroom activity, frequent verbal interruptions by other pupils, frequent inappropriate actions by pupils
___ Highly disruptive classroom activity, loud verbal activity, frequent distractions, unrestrained and inappropriate activity

9. General appearance of classroom

___ Room articles, decoration and arrangements reflect interest in learning and in themselves, are motivators of learning
___ Room articles, decorations and arrangements are of moderate interest to learners, might motivate
___ Articles of poor quality, decorations meager and unlikely to motivate learners
___ No articles of interest, no decorations or objects to motivate

10. Quality of the pupil-teacher relationships

___ Pupils approach the teacher easily and the teacher shows a real feeling for the children and appropriate attention to their needs
___ Pupils sometimes approach the teacher and the teacher shows some feeling and gives some attention to their needs
___ Pupils seldom approach the teacher and the teacher responds little to individual children

11. Write a brief description of other pertinent observations below.

TEACHER'S EVALUATIVE SUMMARY

Student Name _____ Instructor _____

1. Student obeys teacher

Almost Completely 5 4 3 2 1 Seldom

2. Student plays well with others

Very Well 5 4 3 2 1 Poorly

3. Student play habits:

Mostly with own sex _____ ( )
Interacts with others _____ ( )
Mostly with other sex _____ ( )

4. General Temperment:

happy, pleasant, balanced, appropriate 5 4 3 2 1 Generally Unpleasant

5.

Introvertive Withdrawn - shy 5 4 3 2 1 Extrovertive Loud-racous hyperactive

6.

Frequently helps others in positive contructive fashion 5 4 3 2 1 Disrupts Others

SELF-CONCEPT - Second Year

Student I.D. _____

Name _____ Sex (M) (F) Race (W) (B) (S)
(Last) (First) (Circle) (Circle)

School _____

1. How good are you at your school work?

___ 1) Good
___ 2) About the same
___ 3) Poor

2. Are you as good at your school work as your friends?

___ 1) Better than most others
___ 2) About the same as others
___ 3) Not as good as my friends

3. How good are you in your work compared to the rest of the children?

___ 1) Better than most
___ 2) About the same
___ 3) Not as good as most others in the class

4. Do your parents try to get you to do better in your school work?

___ 1) Yes, a lot
___ 2) Yes, some
___ 3) Not sure
___ 4) No, hardly at all
___ 5) None

5. What job do you want to have someday?

___ 1) Professional - college graduate - doctor, lawyer
___ 2) Technical or higly trained - accountant, manager
___ 3) Skilled - machinist - electrician
___ 4) Unskilled - factory work

6. What type of job do your parents want you to have some day? (Describe the occupation and estimate the SES - Use the SES code on question 5.)

1) _____
2) _____
3) _____
4) _____
5) _____

APPENDIX B

Letter to Teachers

Teacher Questionnaire

GRAND RAPIDS PUBLIC SCHOOLS

Grand Rapids, Michigan

May 17, 1971

Dear _____:

As is already known, the Grand Rapids Public School System is conducting a study of children who participated in the 1967-68 Preschool Program (now Phase 3 of the Follow-Through Program), the Project Read Program and the Basal Reading Program.

We have had approval of each phase of our study work through the Offices of Instruction and Elementary Schools. It is important that we have as complete and as honest information from the participants in the programs as possible, so a great deal depends on your response.

In a few days you will receive a questionnaire asking your opinions and suggestions about your program. Your responses on the questionnaire are numbered for computerizing of information - no responses are identified. All data is treated on a group basis. You will receive a report on this study before October, 1971.

You will be receiving material from us in a few days. Thank you in advance for your cooperation and your time. Let us say again that your help in this study is very important.

Sincerely yours,

Jane A. Bonnell, Ph.D.

JAB:cg

TEACHER EVALUATION OF ELEMENTARY CLASSROOM PROGRAMS

Code No. ____
1 2 3

Dear Staff Member:

As you probably know, we have been studying the behavior of students and the opinions of parents as related to the objectives of various elementary educational programs. We are now seeking the help of various staff members in this project: a few have been randomly selected for in-depth interviews while others are helping by responding to the items in this questionnaire. We are able to ask only a few teachers throughout the city to respond to the enclosed questionnaire; therefore, your personal opinion is worth that much more. Please circle the response for each question that best describes how you feel. The answers you give will be treated as confidential; all data will be treated as group data. We will submit a report of our findings to your school so that you will have information about how you and your colleagues, and the community, feel about the nature of various classroom programs and their impact upon students.

We hope you will be able to help us by answering the following questions and the attached questionnaire.

1. What program do you use in your classroom?

    1. Follow-Through
    2. Project Read
    3. Basal Reading
    4. Other (please specify) _____

2. How may years have you taught? _____

3. Have you ever taught under a different kind of program?

    1. Yes
    2. No

4. If you have, what kind was it?

    1. Follow-Through
    2. Project Read
    3. Basal Reading
    4. Other (please specify) _____

5. What would you say are the greatest strengths in your current classroom program?

6. What would you say are the greatest weaknesses in your current classroom program?

7. What suggestions do you have for improving your classroom program? Briefly list these suggestions; describe them if it is necessary.

Please indicate your degree of satisfaction with each of the following items by placing the appropriate response number in the box following each item. Use the following response number -

7 = Very satisfied
6 = Moderately satisfied
5 = Slightly satisfied
4 = Indifferent or neutral
3 = Slightly dissatisfied
2 = Moderately dissatisfied
1 = Very dissatisfied

Item	Response
4. The method employed in my classroom program for making decisions on curriculum matters.	____
5. The cooperation and help I receive from my supervisors.	____
6. The educational philosophy which seems to underlie my current classroom program.	____
7. The evaluation process my supervisor uses to judge my effectiveness as a teacher.	____
8. The motivation for achievement of the students in my classroom program.	____
9. The cooperation and help I receive from parents.	____
10. The extent to which my classroom program accomplishes its stated objectives.	____
11. The extent to which my classroom program gives me freedom for innovation and experimentation.	____
12. The extent to which I find my classroom program stimulates me intellectually.	____
13. The extent to which I find my classroom program to be physically exhausting.	____
14. How I feel about the progress of my students with my current classroom program.	____
15. How I feel about my personal intellectual growth with my current classroom program.	____
16. How I feel about my professional growth with my current classroom program.	____
17. How I feel about my classroom program in general.	____
18. How I feel about the contacts I've been able to make with parents in general.	____
19. The adequacy of the in-service training for my classroom program.	____
20. How I feel about the testing procedures required for my classroom program.	____

How desirous would you be to accept each of the opportunities listed below? Write your answer in the box following each opportunity. Please use the following numbers.

1 = I would reject the opportunity
2 = I would hesitate to accept the opportunity
3 = I am uncertain
4 = I would probably accept the opportunity
5 = I would grasp the opportunity

Opportunity	Response	Opportunity	Response
21. Remain a teacher in my present classroom program for the rest of my educational career.	____	24. Obtain a teaching job in which I could have greater decision-making opportunities.	____
22. Remain a teacher in my present school but in a different classroom program.	____	25. Obtain a teaching job which is less physically demanding.	____
23. Remain as a teacher in my present classroom program for the rest of my career, but move to a school in a neighborhood with a higher socio-economic level.	____	26. Obtain a teaching job which is more flexible and gives greater chances for innovation.	____
		27. Obtain a higher paying position outside the field of education.	____
		28. Obtain a higher paying position within the field of education.	____

Below you are requested to furnish information about your pupils and their parents. Please estimate to the nearest 10 percent, the percentage of your students to whom each of the following statements apply.

	Percent
29. They are interested in school work.	____
30. They are creating discipline problems for you.	____
31. They are creating discipline problems at home.	____
32. They do not have the intellectual capacity to do the work in their classes with you.	____
33. They were adequately prepared to do the work you expected of them when they entered your class.	____
34. They will be adequately prepared to do the work that other teachers will expect of them when they enter class next year.	____
35. They will probably go on to some type of college.	____
36. They will probably drop out of school before graduation.	____
37. They genuinely seem to like to go to school.	____
38. They genuinely seem to dislike going to school.	____

Please estimate the percentage of parents of your pupils to whom each of the following statements apply.

39. Their parents are interested in the school performance of their children.	____
40. Their parents cooperate when their help is requested.	____
41. Their parents are extremely critical of the classroom program.	____
42. Their parents probably will not care if their children drop out of school.	____

	Percent
43. The percentage of parents I have talked with about their children's behavior.	____
44. The percentage of parents that I have been able to contact as often as is necessary.	____
45. The percentage of parents with whom I should be able to have much more extensive contact.	____

46. Regarding the testing procedures for the students in your classroom program, would you say: (please circle number)
    1. There should be much more testing.
    2. There should be somewhat more testing.
    3. It is about right as it is.
    4. There should be somewhat less testing.
    5. There should be considerable less testing.

47. How many students do you now teach? (circle number)
    1. 15 - 19
    2. 20 - 24
    3. 25 - 29
    4. 30 - 34
    5. 35 - 40

48. What level(s) do you teach? _____

49. Some school teaching staffs have been supplemented with paraprofessionals. Some teachers see their help as being "teacher aides," others view them as "teaching aides." If you have such persons in your classroom program, would you say that they function as: (circle number)
    1. Teacher aides
    2. Teaching aides
    3. Neither one completely
    4. This does not apply to my program.

50. If the above question applies to you, how many aides do you have? (circle number)
    1. 0
    2. 1
    3. 2
    4. Have aides on part-time basis only

The notion of accountability has become a major issue in education. A teacher is held accountable to many people, students, the administration, to parents, and to the community. We would appreciate your views about the effects of accountability upon you. For these questions, please consider only your accountability for your students' performance. Please circle the appropriate response.

How accountable for your students' performance do you feel you are held by: (circle number)

51. Parents
    1. Very accountable
    2. Moderately accountable
    3. Unsure
    4. Not accountable

52. Administration
    1. Very accountable
    2. Moderately accountable
    3. Unsure
    4. Not accountable

53. Do you feel you are held more accountable because of your school program? (Project Read, Basal Reading, Follow-Through) (circle number)

1. Much more accountable because of the program
2. More accountable because of the program
3. Less accountable because of the program
4. The program doesn't influence my accountability

54. How do you feel about the extent of accountability you have for students' performance?

1. Quite satisfied
2. Reasonably satisfied and acceptable
3. Dissatisfied
4. Quite dissatisfied
5. I don't feel I am accountable

55. How do you feel your accountability has affected your teaching performance? (circle as many as you feel appropriate)

1. It has forced me to improve my teaching.
2. It has hindered my effectiveness as a teacher.
3. It has increased my sense of professionalism.
4. It has reduced my sense of professionalism.
5. It has not affected my teaching performance.

56. Do you feel teachers should be held accountable for their students performance?

1. Yes, definitely
2. Generally
3. Seldom
4. Not at all

57. Has the extent of accountability of your school program created more work for you?

1. Considerably more work
2. Some more work
3. Less work
4. No work at all

58. In your performance as a teacher, from where do the greatest pressures flow?

1. Administration
2. Parents
3. Fellow teachers

59. How often does your supervisor or principal discuss problems relating to your classroom with you?

1. Daily
2. Weekly
3. Twice a month or so
4. Monthly
5. Almost never

60. What was your fathers MAJOR lifetime occupation? (Please describe what he did, not the place were he worked.)

_____

_____

61. If married, what is your spouse's occupation? (Please describe what he/she does, not the place of employement.)

_____

_____

Thank you very much for your careful assistance in completing this questionnaire.

5/11/71

APPENDIX C

Letter to Parents

Parent Interview Schedule

GRAND RAPIDS PUBLIC SCHOOLS

Grand Rapids, Michigan

April 26, 1971

Dear Parent:

In the near future, a member of our research staff will be coming to your residence to get some information about your opinions about our school system. In order for your schools to better serve the needs of your children, it is essential that we have your viewpoints, attitudes and suggestions for improvement.

Before the research interviewer calls on you, you will be contacted by telephone in order to set up an appointment. When the interviewer calls - he will present proper identification upon your request - he will ask you a short series of questions about your feelings toward the school system in general. The answers that you and all other parents give will be treated as confidential. These answers will not be shown to anyone else besides the research staff at the Office of Testing and Evaluation. The research staff will submit a report to the Grand Rapids Board of Education about how you and other parents feel about your child's school, your child's future educational and occupational goals, and what you think about education in general.

Since we are able to ask only a few persons to express their opinions, your own personal opinion is worth that much more. Therefore, the help that you can give us in this attempt will be most sincerely appreciated.

Thank you for your consideration.

Sincerely,

Clifford E. Bryan
Research Associate
Office of Testing and Evaluation

CEB:pc

PARENTAL INTERVIEW
FOURTH LEVEL EXPERIMENTAL EDUCATION

Item	Description	Col.
	Parent I. D.	1,2,3
	School I. D.	4,5
2	Do you think that the school your child is going to now is helping him to get ready for high school? 1. ___ Yes 2. ___ No 3. ___ Not sure either way	6_____
3	How often does your child talk about the work he is doing in school? Woud you say he talks about it a <u>lot</u> (3); <u>sometimes</u> (2); <u>seldom</u> (1); or <u>never</u> (0)?	7_____
4	How does your child feel about the work he does at school? Does he think it is hard work (2); or too easy (0) for him? (About right = 1)	8_____
5	Do you feel that the work he does in school is <u>too easy</u> (0) or <u>too hard</u> (2) for him? (About right = 1)	9_____
6	Do you think your child has <u>better than a 50-50 chance</u> (1) or <u>less than a 50-50 chance of finishing high school</u> (0)?	10_____
7	How far do you expect your child to go in school? 1. ___ To quit as soon as he can. 2. ___ To continue in high school for a while. 3. ___ To graduate from high school. 4. ___ To go to secretarial, trade or business school. 5. ___ To go to college for a while. 6. ___ To graduate from college. 7. ___ To do graduate work beyond college.	11_____
8	How important is it to you for your child to get among the highest ratings in school? 1. ___ Very important 2. ___ Important 3. ___ Not particularly important 4. ___ Grades don't matter at all	12_____
9	Forget for a moment how the teacher evaluated your child's work. Please tell us about how <u>YOU</u> feel about the kind of work he does in school. 1. ___ His work is excellent. 2. ___ His work is good. 3. ___ His work is average. 4. ___ His work is below average. 5. ___ His work is much below average.	13_____

10 Do you feel that the school program allows your child enough freedom to pursue his own interests?

1. ___ Yes, definitely
2. ___ Yes, for the most part
3. ___ Not sure either way
4. ___ No, not for the most part
5. ___ Definitely not

14_____

11 How well do you think your child gets along with other children?

1. ___ Very well
2. ___ Fairly well
3. ___ Rather poorly
4. ___ Very poorly

15_____

12 In general, would you say that your child's teacher is interested in how well he does in school?

1. ___ Yes, definitely
2. ___ Yes, probably
3. ___ Not sure either way
4. ___ Probably not
5. ___ Definitely not

16_____

13 If your child received a <u>good</u> evaluation from his or her teacher what would you do?

1. ___ I give him (or her) more privileges.
2. ___ I give him (or her) money.
3. ___ I praise him (or her).
4. ___ I don't do anything out of the ordinary.

17_____

14 If your child received a <u>poor</u> evaluation from his or her teacher, what would you do?

1. ___ I take away privileges.
2. ___ I physically punish him (or her).
3. ___ I don't do anything out of the ordinary.
4. ___ I ask him (or her) to explain why he did poorly.
5. ___ I offer to help him (or her) with school work.

18_____

15 Do you know what your child is doing in his reading class in school now?

0. ___ No
1. ___ Yes

19_____

16 (If yes) What materials (books) is he using in reading? Interview probe and code as follows:

5. ___ <u>Very well informed</u> - if parent knows approximate name of book, place in book, i.e., chapter, difficulties in reading, etc.
4. ___ <u>Well informed</u> - if parent knows what book is about, stories in the book, stories they take home, etc.

3. ___ Fairly well informed - if parent only occasionally hears about stories their child is reading, or what he is doing in reading class, i.e., maybe only hears about once a month.
2. ___ Slightly informed - if parent can only indicate that they know their child is reading something but can't tell anything about it.
1. ___ Uninformed. 20_____

17 Mr(s). _____, how well informed/how aware/ are you about what and how _____ is doing in school? (child's name)

5. ___ I (We) are extremely well informed. No matter how poorly my child is doing in school, I (we) will find out. My child or other people keep me informed on a regular basis. I am able to pay very close attention to what my child does in his school work.
4. ___ I (We) are well informed. We know quite a bit about what and how well my child is doing. We generally know what and how well he is doing, but not always.
3. ___ I (We) are fairly well informed. Occasionally, my child or someone else tells me what he is doing in his school work.
2. ___ I (We) are only slightly informed. Only seldomd does my child or anyone else tell me what he is doing in his school work.
1. ___ I (We) know almost nothing about what or how well my child is doing in his school work. 21_____

18 Do you think your child's teachers have a good knowledge of the subjects they teach in class?
1. ___ Yes, definitely
2. ___ Yes, probably
3. ___ Not sure
4. ___ Probably not
5. ___ Definitely not 22_____

19 In general, do you think your child's teachers are fair in their evaluations of your child? (Probe on ability and on achievement)

Ability	Achievement
1. ___ Yes, definitely	1. ___ Yes, definitely
2. ___ Yes, probably	2. ___ Yes, probably
3. ___ Not sure	3. ___ Not sure
4. ___ Probably not	4. ___ Probably not
5. ___ Definitely not	5. ___ Definitely not

(Ability) 23_____
(Achievement) 24_____

20 Does your child have a teacher aide in his (or her) class?

1. ___ No
2. ___ Yes
3. ___ Don't know

25_____

21 Do you feel that your child's teacher aides have a good knowledge of the subjects they teach?

1. ___ Yes, definitely
2. ___ Yes, probably
3. ___ Not sure
4. ___ Probably not
5. ___ Definitely not

26_____

22 Do you feel that having a teacher aide brings you in closer contact with the school?

1. ___ Yes, definitely
2. ___ Yes, probably
3. ___ Not sure
4. ___ Probably not
5. ___ Definitely not

27_____

23 How often does your child need help with his school work at home?

1. ___ A lot
2. ___ Sometimes
3. ___ Seldom
4. ___ Never

28_____

24 How often in the past month have you helped your child with his school work at home?

1. ___ One or more times a week
2. ___ Every two weeks
3. ___ Once every month
4. ___ (Indicate time and hours)
5. ___ Never

29_____

25 Have you been to school this school year for any reason? (Interviewer please list reasons why parent visited school. e.g., PTA, teacher conferences, etc. List how many times the parent visited the school.)

Col #30	#31 (Reasons why)	#32 (Times)	
0 = No	0 = No	0 = 0	30_____
1 = Yes	1 = School conferences	1 = 1	
	2 = School initiated activities, PTA		
	3 = Problem related visits	°	31_____
	4 = Community activity related		
	5 = Recreational activity (carnival, scouts)	°	
	6 = 1 and PTA		32_____
	7 = 1 and PTA and 4	°	
	8 = 1 and PTA and 3		
	9 = 1, 2, 3, 4	9 = 9+	

26 Have you talked on the phone this school year to teachers or others at school about your child's activities? (Interviewer please ask what types of things were discussed, e.g., grades, child's behavior, etc. Find out who initiated the conversation (parent, teacher, or teacher aide). Find out who the parent talked to (teacher, teacher aide, other).

Col #33	#34 (Calls from school)	#35	#36	
0 = 0 (No)	1 = Behavior Problem	(Calls from Parent)	(Who talked to)	
1 = 1	(fighting, discipline)	See #34	1 = Principal	33_____
2 = 2	2 = Health problems		2 = Teacher	
:	3 = Academic problems		3 = Aides	34_____
	(grades)		4 = Specialists	
9 = 9+	4 = Socio-emotional probs.		5 = 1 and 2	35_____
	(speech, psych, etc.)		6 = 1, 2, and 3	
	5 = Other school related		7 = 1, 2, 3, 4	36_____
	activities		8 = Other combi-	
			nations	

27 Have you worked in any school activities this school year? (Interviewer please list the types of activities the parent was involved in, e.g., bakegood sales, play carnivals, etc. Also, list how many times the parent was involved in these activities.)

Col #37	#38	#39 (Frequency)	
0 = None	0 = No	0 = 0	37_____
1 = Yes	1 = Donate goods for sale & carnival	1 = 1	
	2 = Helped, PTA	2 = 2	
	3 = Helped, class trip	°	38_____
	4 = Helped, millage meeting	°	
	5 = Room mother	°	
	6 = Helped, banquet	°	39_____
	7 = Sales (candy, etc.)	9 = 9+	
	8 = Helped, carnival & fun nite		

28 Are there any other people than his (or her) teacher that ever talk to you about what your child is doing in school? (neighbors, aides, counselors, etc.)

Col #40

0 = No	4 = Other teachers	
1 = Friends & neighbors	5 = School services (nurse,	
2 = Family (relatives, etc.)	counselors, etc.)	
3 = Teacher aides	6 = School administrators	40_____

29 What do you think is the most important thing for your child to get out of school?

1 = Idealistic value - i.e., knowledge for knowledge sake
2 = Economic value - get better job; economic advancement, etc.
3 = Personal value - self improvement; self actualization, personality development, etc.
4 = Social adjustment - get along with others, learns to adjust to different social environment, etc. 41_____

30 Any others?

- Same as above--Leave blank if none - 42_____

31 Do you think your child can do school work better, the same, or poorer than his friends?

1. ___ Poorer
2. ___ The same
3. ___ Better

43_____

32 If there was a problem with your child at his school who would be the first person you would go to talk to about it?

1. ___ Principal
2. ___ His teacher
3. ___ Family member
4. ___ Teacher aide
5. ___ Spouse
6. ___ Friend
7. ___ Other, specify _____

44_____

33 Do you vote in school board elections?

1. ___ Yes, every time
2. ___ Yes, sometimes
3. ___ No, I am unable to attend
4. ___ No, I do not care to participate

45_____

34 Do you think it helps the children when the teachers and parents talk together?

1. ___ Yes
2. ___ No

46_____

35 How often should teachers and parents talk together?

1 = 1 per year
2 = 2 per year
3 = 3 per year
4 = 4 (2 per semester)
5 = 5 per year
6 = 6 (3 per semester)
7 = Monthly
8 = More than 1 per month
9 = When problems arise

47_____

36 Do you really think the reading program your child is in will provide him with an opportunity for academic advancement?

1. ___ Yes
2. ___ No

48_____

37 Would you like your child to continue in his current school program?

1. ___ Yes
2. ___ No

49_____

38 Did you vote in the last school millage election?

1. ___ Yes
0. ___ No

50_____

40 Respondent
1. ___ Mother
2. ___ Father
3. ___ Step mother
4. ___ Step father
5. ___ Guardian 51_____

41 Marital status
1. ___ Married
2. ___ Divorced
3. ___ Separated
4. ___ Remarried
5. ___ Other 52_____

42 Who child is currently living with:
1. ___ Original parents
2. ___ Mother & step father
3. ___ Father & step mother
4. ___ Only mother
5. ___ Only father
6. ___ Guardian 53_____

43 Language spoken:
1. ___ English only
2. ___ English and _____(specify) 54_____

44 Race
1. ___ White
2. ___ Black
3. ___ Spanish
4. ___ Other (specify) _____ 55_____

45 Education of head of household:
1. ___ 8th grade or less
2. ___ Some high school
3. ___ High school graduate
4. ___ Secretarial, trade or business school
5. ___ Some college
6. ___ College graduate 56_____

46 Occupation of head of household:
1. ___ Professional, technical-teacher
2. ___ Business manager, official, proprietor
3. ___ Skilled, craftsman, foreman, kindred worker
4. ___ Semi-skilled, clerical, sales worker, teacher aide
5. ___ Unskilled, service, domestic worker
6. ___ Housewife
7. ___ Unemployed, relief, ADC
9. ___ Uncodable, no information 57_____

47 Occupation of spouse:
- Same as above - 58_____

48 Teacher Code 59-60_____

APPENDIX D

Interview Outline for Principals and Teachers

OUTLINE FOR INTERVIEWS WITH PRINCIPALS AND TEACHERS

These questions are listed for topical reference only.

1. Compare and contrast the program

2. Define and contrast goals of the program

3. Describe the different instructional techniques used in the program (programmed learning, reinforcement, etc.)

4. Surveillance and accountability of the teachers of the program
   a) extent of principal involvement, frequency
   b) accountability of teachers
   c) responsibilities of principals and teachers

5. Testing patterns and form
   a) form, frequency, extent
   b) accountability of teacher for student performance

6. Interaction of program
   a) diffusion of program - contamination
   b) cross-fertilization of information
   c) cross-program familiarity

7. Principal and teacher satisfaction
   a) absenteeism
   b) interest - enthusiasm
   c) case of substitutability

8. Teacher training
   a) extent, form, structural seminar - self study
   b) adoptability to regular teachers
   c) professionalism and involvement

9. Principals role
   a) distribution of time
   b) classroom involvement
   c) problems of administration
   d) discipline problems
   e) parental involvement

10. Contribution of program to the development of social competence of the student
   a) self-sustaining behavior - self reliance
   b) student ratification
   c) behavioral problems of student

11. Major contributions and problems of the programs

The interview is open ended, thus allowing and encouraging a greater range and variety of responses. In the actual interview, the topics will be integrated into the flow of discussion.

May 3, 1971
BH/pc